

Corrections and Additions to *Taxonomists' Glossary of Mosquito Anatomy*<sup>1</sup>

Ralph E. Harbach<sup>2</sup> and Kenneth L. Knight<sup>3</sup>

**Abstract.** Corrections and additions are provided for *Taxonomists' Glossary of Mosquito Anatomy* by Harbach and Knight (1980).

### INTRODUCTION

Since *Taxonomists' Glossary of Mosquito Anatomy* (Harbach and Knight 1980) was published, certain errors have been discovered that went undetected during the final preparation of the volume. Through the exhortations of John F. Reinert and Ronald A. Ward, and the encouragement of Richard H. Foote, this supplement was prepared to point out and correct the noted errors. Additionally, this communication includes several newly recommended terms, many new synonymous terms and a number of previously uncited references to anatomical works.

The format employed in the glossary has been utilized throughout (see p. xi of the glossary). New terms recommended for general use are marked by the symbol +. Underscoring is used to indicate non-entry words describing the action to be taken with each entry. Entries *per se* are not underscored. Corrections and additions to the index are listed separately. It would be of value to everyone working with mosquitoes to transfer the corrections and additions directly to the appropriate places in the glossary.

The following individuals graciously called our attention to errors in the glossary: Jack Colvard Jones, Kenneth J. Linthicum, John F. Reinert and George C. Steyskal. Thomas H. Hogan, President, Plexus Publishing, Inc. kindly endorsed the preparation of this publication. Sincere thanks are due Michael E. Faran, E.L. Peyton and Ronald A. Ward for their suggestions and criticisms. Appreciation is also expressed to Gale Munro for typing the manuscript.

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# Report Documentation Page

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## TAXONOMISTS' GLOSSARY OF MOSQUITO ANATOMY

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## FOREWORD

- v. In paragraph 3, line 13 correct Jung to Tung.

## ADULT

1. + **ACROSTERNITE (As)** [Owen 1980,157] -- The part of a sternum anterior to the antecostal suture; absent from the thoracic sterna. Acrosternites have not been studied or recognized in the abdominal sterna of most mosquitoes and are known only in *Culiseta inornata* (Williston).

**ACROTERGITE.** Add to definition Acrotergites have not been studied or recognized in the abdominal terga of most mosquitoes and are known only in *Culiseta inornata* (Williston) (Owen 1980,157). Change Syn. (line 4) to Syn. for acrotergite of mesonotum

**AEDEAGAL SCLERITE.** Add to syn. sclerotized plate of mesosome, Rees and Onishi 1951,246

2. **ANEPISTERNAL CLEFT.** Correct meskatepisternum (line 3) to mesokatepisternum

- + **ANTECOSTA (An)** [Owen 1980,157] -- The anterior, internal transverse ridge of a tergum or sternum marked externally by the antecostal suture, serving for the attachment of longitudinal muscles; bearing the phragmata of the meso- and metanota (see **FIRST PHRAGMA** and **SECOND PHRAGMA**). Antecostae have not been studied or recognized in the abdominal segments of most mosquitoes; the antecosta is well differentiated on both the tergum and sternum of abdominal segment II of *Culiseta inornata* (Williston), and is present as a light band in the remaining abdominal segments of this species (Owen 1980, 157).

**ANTECOSTAL SUTURE.** Correct definition to The external groove of the antecosta. That of the antecosta bearing the first phragma is not readily visible in mosquitoes. Antecostal sutures have not been studied or recognized in the abdominal segments of most mosquitoes but are known to occur on the terga and sterna of abdominal segments II and III in *Culiseta inornata* (Williston) (Owen 1980,157).

- + **ANTENNAL PULSATING ORGAN (APO)** (Figs.2,7) [Clements 1956,429] -- In various insects, a pulsatile structure that drives blood into the antennae. In certain Diptera, comprised of a pair of vesicles situated between the bases of the antennae, each giving off a vessel to the antenna of its side and each connected by a muscle to the aorta. In mosquitoes, each vesicle is marked externally by a depression located on either side of the interantennal groove be-

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tween the antennal sockets and postfrontal sutures. (Syn: ocellus, Thompson 1905,192; Stirnauge, Martini 1923b,19; lateral ocellus, Patton and Evans 1929,54; tambour organ, Day 1955,331; dorsal ocellus, Christophers 1960,420)

3. **ANTEPRONOTUM.** Add to syn. anteprenotal lobe, Stone 1981,334
- ANTERIOR MESANEPISTERNUM.** Correct meskatepisternum (line 3) to mesokatepisternum
5. **BASAL PIECE.** Add to syn. (page 6) apodemous inflection, Zaka-Ur-Rab 1980,10; basal inflection of the outer paramere, Zaka-Ur-Rab 1980,10; internal inflection of outer paramere, Zaka-Ur-Rab 1980,13; gonocoxital apodeme, Owen 1980,155
6. **CELL M.** Add to syn. cell bm [basal medial], Stone 1981,341
7. **CELL R.** Add to syn. cell br [basal radial], Stone, 1981,341
- CERCAL SCLERITE.** Add to syn. tergum 10, Owen, 1980,167
8. **CIBARIAL ARMATURE.** Add to syn. ventral pharyngeal valve, Uchida 1979,159
- CIBARIAL DOME.** Add to syn. dorsal pharyngeal valve, Uchida 1979,159
- CIBARIAL RIDGE.** Add to syn. finger-like projection, Uchida 1979,159
11. **DORSAL POSTGENITAL LOBE INDEX.** Correct definition to In female mosquitoes, the dorsal postgenital lobe length divided by the dorsal postgenital lobe width.
12. **DORSAL SETA.** Add to syn. campaniform sensillum, Uchida 1979, in part, 159
13. **FIRST PHRAGMA.** Replace A transverse apodeme (line 1) with The platelike (usually) apodemal arms of the antecosta located...
14. **FURCASTERNUM.** Correct of the mosquito, (line 5) to of mosquitoes,
16. **GONOCOPODITE.** Add to syn. Cercus, Ehlert 1979,197; outer paramere, Zaka-Ur-Rab 1980,10
- GONOPORE.** Add to syn. for ♂ phallotreme, Zaka-Ur-Rab 1980,13
- GONOSTYLUS** Add to syn. stylus, Matsuda 1976,345
17. **HALTER.** Add to syn. Schwingkölbchen, Ehlert 1979,196

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- HUMERAL PLATE.** Correct in the mosquito. (line 2) to in mosquitoes.
20. **LABIAL BASAL SETA.** Correct (Figs.1-3) to (Figs.2,3)
- LABIUM.** Add to syn. 2. Maxillen, Ehlert 1979,192; Stechborstenscheide, Ehlert 1979,193
22. **LOWER MESKATEPISTERNAL SCALE.** Correct to LOWER MESOKATEPISTERNAL SCALE. Correct meskatepisternal (line 2) to mesokatepisternal
- LOWER MESKATEPISTERNAL SETA.** Correct to LOWER MESOKATEPISTERNAL SETA. Correct meskatepisternum (line 2) to mesokatepisternum and meskatepisternal (line 3) to mesokatepisternal
23. **MANDIBLE.** Add to syn. 1. Maxillen, Ehlert 1979,192
- MAXILLARY PALPUS.** Following the syn. Maxillartaster (page 24) delete Vogel 1921,276 and cite Lindner 1919,20 for the first use of the term.
25. **MESANAPLEURAL SUTURE.** Correct meskatepisternum (lines 2 and 3) to mesokatepisternum
- MESANEPIMERON.** Correct meskatepimeron (line 3) to mesokatepimeron
- MESANEPISTERNUM.** Correct meskatepisternum (line 2) to mesokatepisternum
- MESEPIMERON.** Correct meskatepimeron (lines 3 and 5) to mesokatepimeron
- MESEPISTERNUM.** Correct meskatepisternum (lines 2 and 5, page 26) to mesokatepisternum
26. **MESKATEPIMERON.** Correct to MESOKATEPIMERON and place this and the next four entries alphabetically after MESOFURCASTERNUM.
- MESKATEPISTERNAL BRIDGE.** Correct to MESOKATEPISTERNAL BRIDGE. Correct meskatepisterna (line 2) to mesokatepisterna
- MESKATEPISTERNAL SCALE.** Correct to MESOKATEPISTERNAL SCALE. Correct meskatepisternum (line 1) to mesokatepisternum and meskatepisternal (line 2) to mesokatepisternal
- MESKATEPISTERNAL SETA.** Correct to MESOKATEPISTERNAL SETA. Correct meskatepisternum (line 1) to mesokatepisternum and meskatepisternal (line 2) to mesokatepisternal
- MESKATEPISTERNUM.** Correct to MESOKATEPISTERNUM. Insert meskatepisternum, before Patton and Evans (line 1) and add mesokatepi-

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sternum, before Wood *et al.* (line 2).

27. **MESOPLEUROSTERNAL SUTURE.** Correct meskatepisternum (line 2) to mesokatepisternum
- MESOPOSTNOTAL SETA.** Add to syn. postnotal setula, Mattingly 1971[f], Figs. 3c-d, Pl. 1
28. **MESOTROCHANTIN.** Correct meskatepisternum (line 2) to mesokatepisternum
30. **OCELLUS.** Delete entire entry. [See **ANTENNAL PULSATING ORGAN** (page 2)]
31. **PARACOXAL SUTURE.** Correct meskatepisternum (line 2) to mesokatepisternum
- PARAMERE.** Add to syn. (page 32) parameral apodeme, Matsuda 1976,345; basal sclerite, Zaka-Ur-Rab 1980,10; basal sclerotic plate, Zaka-Ur-Rab 1980,13
32. **PARAPROCT.** Add to syn. for ♂ paramere, Matsuda 1976,345; inner paramere, Zaka-Ur-Rab 1980, including tergum X, 10; apical portion of the inner paramere, Zaka-Ur-Rab 1980,10; apical portion of inner paramere, Zaka-Ur-Rab 1980,13; sternum 10, Owen 1980,166; ventral arm of sternum 10, Owen 1980, in part, 166; sternite 10, Stone 1981,346
33. + **pharyngeal valve** [Uchida 1979,162] -- The combined cibarial dome and cibarial armature.
34. **POSTERIOR MESANEPISTERNUM.** Correct meskatepisternum (line 3) to mesokatepisternum
35. **POSTGENITAL LOBE.** Add to syn. eleventh sternite, Christophers 1951,374; post-genital plate, Christophers 1951,376
36. **POSTPROCOXAL MEMBRANE.** Correct meskatepisternum (line 2) to mesokatepisternum
43. **SECOND PHRAGMA.** Correct definition to The oval flaplike apodemal lobes of the antecosta of the mesopostnotum; bearing the attachment of some longitudinal flight muscles.
48. **TERGUM IX.** Add to syn. for ♂ sclerotic bar, Zaka-Ur-Rab 1980, in part, 9; sclerotic bar of ninth sternum, Zaka-Ur-Rab 1980, in part, 13; tergum 9, Owen 1980,165
- TERGUM X.** Add to syn. for ♂ interbasal plate, Rees and Onishi 1951, in part, 237; inner paramere, Zaka-Ur-Rab 1980, including the

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paraproct, 10; basal portion of the inner paramere, Zaka-Ur-Rab 1980,10; basal portion of inner paramere, Zaka-Ur-Rab 1980,13; dorsal arm of sternum 10, Owen 1980,166

49. **UPPER MESKATEPISTERNAL SCALE.** Correct to UPPER MESOKATEPISTERNAL SCALE. Correct meskatepisternal (line 2) to mesokatepisternal
50. **UPPER MESKATEPISTERNAL SETA.** Correct to UPPER MESOKATEPISTERNAL SETA. Correct meskatepisternum (line 2) to mesokatepisternum
- UPPER VAGINAL SCLERITE.** Add to definition apparently homologous with sternum IX of generalized insects but so modified as to be worthy of separate consideration. Add to syn. vaginal apodeme, Christophers 1951,374; sternum 9, Owen 1980,158; apodeme of sternum 9, Owen 1980, in part, 155
51. **VENTRAL POSTGENITAL LOBE INDEX.** Correct definition to In female mosquitoes, the ventral postgenital lobe length divided by the dorsal postgenital lobe width.
56. **Abbreviations.** Delete LBS - labial basal seta and add Mts - metepisternum
57. **Fig. 1.** Correct Mn to Mm. Replace Mtpn with Mts and label narrow sclerite to right of this Mtpn
58. **Abbreviations.** Add APO - antennal pulsating organ and delete Oc - ocellus
59. **Fig. 2a.** Replace Oc with APO
60. **Abbreviations.** Add OSI - ocular sclerite
63. **Fig. 4e.** Correct PAP to PTP
68. **Abbreviations.** Add APO - antennal pulsating organ and delete Oc - ocellus
69. **Fig. 7a.** Replace Oc with APO
78. **Abbreviations.** Correct meskatepimeron to mesokatepimeron; meskatepisternum to mesokatepisternum; lower meskatepisternal seta to lower mesokatepisternal seta; and upper meskatepisternal seta to upper mesokatepisternal seta
80. **Abbreviations.** Correct meskatepimeron to mesokatepimeron; meskatepisternum to mesokatepisternum; lower meskatepisternal seta to lower mesokatepisternal seta; upper meskatepisternal seta to upper mesokatepisternal seta; lower meskatepisternal scale to lower mesokatepisternal scale; and upper meskatepisternal scale to upper

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mesokatepisternal scale

81. **Fig. 13a.** Correct PESU to PeSU**Fig. 13b.** Correct the lower MtS to Mts82. **Abbreviations.** Correct meskatepimeron to mesokatepimeron; meskat-episternum to mesokatepisternum; meskatepisternal bridge to mesokatepisternal bridge; lower meskatepisternal seta to lower mesokatepisternal seta; and upper meskatepisternal seta to upper mesokatepisternal seta.84. **Abbreviations.** Add Mfs - mesofurcasternum, MksB - mesokatepisternal bridge and Sct -- sternacosta85. **Fig. 15d.** Label the curved inflection at the upper left Mef86. **Abbreviations.** Correct lower meskatepisternal seta to lower mesokatepisternal seta; upper meskatepisternal seta to upper mesokatepisternal seta; lower meskatepisternal scale to lower mesokatepisternal scale; and upper meskatepisternal scale to upper mesokatepisternal scale94. **Abbreviations.** Add ADL - apicodorsal lobe97. **Fig. 21a.** Correct GS to Gs100. **Abbreviations.** Add PH - phallosome101. **Fig. 23c.** Correct Pha to PH103. **Fig. 24f.** Correct GS to Gs

## LARVA

131. **ANTENNAL PROMINENCE.** Add to syn. lobe, Stone 1981,347132. **ANTERIOR TENTORIAL ARM.** Add to syn. bras antérieur du tentorium, Chaudonneret 1952,401**ANTEROMEDIAN PALATAL FILAMENT.** Add to syn. central preapotal bristle, Colless 1979[b],21; palatal seta, Mattingly 1981,68135. **COLLAR.** Replace Snodgrass 1959,4 (line 6) with Chaudonneret 1952,401136. **COMPOUND EYE.** Add to syn. oeil imaginal, Chaudonneret 1952,401138. **EGG-BUSTER.** Correct to EGG-BURSTER and correct egg buster (line 5) to egg burster

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- epipharynx.** Add Chaudonneret 1952,401 to the list of authors who have followed the third usage of this term (page 139, line 4).
139. **EPISTOMAL RIDGE.** Add to syn. phragme antennaire, Chaudonneret 1952,401
145. **LATERAL PALATAL BRUSH FILAMENT.** Add to syn. soie prémandibulaire, Chaudonneret 1952,401; lateral palatal bristle, Colless 1979[b],21
161. **RUDIMENTARY SPIRACLE.** Correct I-VII. (line 5) to II-VII.
171. **SETA 1-S.** Add to syn. subventral hair, Belkin 1962,179; subventral seta, Stone 1981,347; siphonal seta, Stone 1981,347
172. **SETA 1-X.** Add to syn. lateral seta, Stone 1981,347
- SETA 4-X.** Add to syn. ventrolateral seta, Stone 1981,347
174. **SPIRACULAR APPARATUS.** Add to syn. spiracular disc, Stone 1981,348
- STEMMA.** Add to syn. oeil larvaire, Chaudonneret 1952,401; (page 175) Punktauge, Ehlert 1979,192
176. **TORMA.** Add to syn. premandibule, Goetghebuer 1925,153
182. **Abbreviations.** Add HEL - hypocranial ecdysial line
189. **Fig. 36a.** Replace MdAP with MAdA
- Fig. 36d.** Correct area of L to area of LG
191. **Fig. 37a.** Delete Sca
206. **Abbreviations.** Add AS - antennal socket and DPhS - dorsal pharyngeal sclerite
209. **Fig. 46a.** Correct MnC to MnCS
- Fig. 46b.** Correct MnCE to MnCS
216. **Abbreviations.** Correct PDt to PDT
221. **Fig. 52a.** Correct HSc to Cd
225. **Fig. 54c.** Correct 3 to 2
- Fig. 54e.** Correct 3 to 2
231. **Fig. 57a.** Correct PcP to PCP

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238. **Abbreviations.** Delete MSp - marginal spicules and add SMS - saddle marginal spicules

**PUPA**

283. **SETA 13-CT.** Add Reinert (1981) recounted the presence of this seta in the Culicidae and reported on its occurrence in *Aedes aurotaeniatatus* Edwards.
292. **Abbreviations.** Add Scu - scutum

**VESTITURE**

308. **Chart 1.** Add *Bifurcated* under SETA
311. **SETA.** Add bifurcated to the list of names of branched setae (line 9). Add to syn. setula
312. + *Bifurcated* [Marshall 1938,37] -- With two branches of equal or nearly equal length arising together, usually below the distal third, commonly at the base. (Syn.: bifid hair, Marshall 1938,37)
- Fanlike.* Delete bifid hair, Marshall 1938,37 (line 5) and bifurcated hair, Marshall 1938,37 (line 6).

**LITERATURE CITED**

326. Carpenter, S.J. and W.J. LaCasse. 1955. Correct 353 pp. to vi + 360 pp.
327. Christophers, S.R. 1960. Correct Oxford. ix to Cambridge. xii

**INDEX****Corrections**

349. accessory plate of mesoepimerum (**MESKATEPIMERON**). Correct recommended term to **MESOKATEPIMERON**
356. bifid hair (*Fanlike* **SETA**). Substitute *Bifurcated* for *Fanlike*  
bifurcated hair (*Fanlike* **SETA**), V312. Delete and substitute *Bifurcated* **SETA**, V312
364. egg-breaker (**EGG-BUSTER**). Correct recommended term to **EGG-BURSTER**  
egg breaker (**EGG-BUSTER**). Correct recommended term to **EGG-BURSTER**

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- egg-breaker spine (**EGG-BUSTER**). Correct recommended term to EGG-BURSTER
- EGG-BUSTER**. Correct to EGG-BURSTER
- egg buster (**EGG-BUSTER**). Correct to egg burster (EGG-BURSTER)
- egg-tooth (**EGG-BUSTER**). Correct recommended term to EGG-BURSTER
365. episternal plate (**MESKATEPISTERNUM**). Correct recommended term to MESOKATEPISTERNUM
370. hatching spine (**EGG-BUSTER**). Correct recommended term to EGG-BURSTER
373. katepisternum (**MESKATEPISTERNUM**). Correct recommended term to MESOKATEPISTERNUM
375. lateral ocellus. Delete (OCELLUS), A30 and add (ANTENNAL PULSATING ORGAN), A2
377. lower episternal chaeta (**LOWER MESKATEPISTERNAL SETA**). Correct recommended term to LOWER MESOKATEPISTERNAL SETA (page 378).
378. lower katepisternal seta (**LOWER MESKATEPISTERNAL SETA**). Correct recommended term to LOWER MESOKATEPISTERNAL SETA
- lower mes-episternal bristle (**LOWER MESKATEPISTERNAL SETA**). Correct recommended term to LOWER MESOKATEPISTERNAL SETA
- lower mesepisternal seta (**LOWER MESKATEPISTERNAL SETA**). Correct recommended term to LOWER MESOKATEPISTERNAL SETA
- LOWER MESKATEPISTERNAL SCALE**. Correct to LOWER MESOKATEPISTERNAL SCALE
- LOWER MESKATEPISTERNAL SETA**. Correct to LOWER MESOKATEPISTERNAL SETA
- lower sternopleural bristle (**MESKATEPISTERNAL SETA**). Correct recommended term to MESOKATEPISTERNAL SETA
- lower sternopleural group (**LOWER MESKATEPISTERNAL SETA**). Correct recommended term to LOWER MESOKATEPISTERNAL SETA
- lower sternopleural scale patch (**LOWER MESKATEPISTERNAL SCALE**). Correct recommended term to LOWER MESOKATEPISTERNAL SCALE
- lower sternopleural seta (**LOWER MESKATEPISTERNAL SETA**). Correct recommended term to LOWER MESOKATEPISTERNAL SETA

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382. mesepisternal bridge (**MESKATEPISTERNAL BRIDGE**). Correct recommended term to **MESOKATEPISTERNAL BRIDGE**
- mes-episternal bristle (**MESKATEPISTERNAL SETA**). Correct recommended term to **MESOKATEPISTERNAL SETA**
- mesepisternalen Schuppenfleck (**MESKATEPISTERNAL SCALE**). Correct recommended term to **MESOKATEPISTERNAL SCALE**
- mesepisternal seta (**MESKATEPISTERNAL SETA**). Correct recommended term to **MESOKATEPISTERNAL SETA**
- MESKATEPIMERON**. Correct to **MESOKATEPIMERON** and place this entry alphabetically after mesofurcum
- MESKATEPISTERNAL BRIDGE**. Correct to **MESOKATEPISTERNAL BRIDGE** and place this and the next three entries alphabetically after **MESOKATEPIMERON**
- MESKATEPISTERNAL SCALE**. Correct to **MESOKATEPISTERNAL SCALE**
- MESKATEPISTERNAL SETA**. Correct to **MESOKATEPISTERNAL SETA**
- MESKATEPISTERNUM**. Correct to **MESOKATEPISTERNUM**
383. meso-sternum (**MESKATEPISTERNUM**). Correct recommended term to **MESOKATEPISTERNUM**
384. Middenbeugel (**MESKATEPISTERNUM**). Correct recommended term to **MESOKATEPISTERNUM**
- Mittelbügel (**MESKATEPISTERNUM**). Correct recommended term to **MESOKATEPISTERNUM**
- Mittelhaar (**UPPER MESKATEPISTERNAL SETA**). Correct recommended term to **UPPER MESOKATEPISTERNAL SETA**
385. obere Mesepisternal-Borste (**UPPER MESKATEPISTERNAL SETA**). Correct recommended term to **UPPER MESOKATEPISTERNAL SETA**
- obere Sternopleuralborste (**UPPER MESKATEPISTERNAL SETA**). Correct recommended term to **UPPER MESOKATEPISTERNAL SETA**
- OCELLUS**, A30. Delete and substitute ocellus (**ANTENNAL PULSATING ORGAN**), A2
391. posterior sternopleural bristle (**LOWER MESKATEPISTERNAL SETA**). Correct recommended term to **LOWER MESOKATEPISTERNAL SETA**

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393. preepisternal bridge (**MESKATEPISTERNAL BRIDGE**). Correct recommended term to **MESOKATEPISTERNAL BRIDGE**
- preepisternum 2 (**MESKATEPISTERNUM**). Correct recommended term to **MESOKATEPISTERNUM**
402. soie sternopleurales (**MESKATEPISTERNAL SETA**). Correct recommended term to **MESOKATEPISTERNAL SETA**
403. sternopleural bridge (**MESKATEPISTERNAL BRIDGE**). Correct recommended term to **MESOKATEPISTERNAL BRIDGE**
- sternopleural bristle (**MESKATEPISTERNAL SETA**). Correct recommended term to **MESOKATEPISTERNAL SETA**
- sternopleural chaeta (**MESKATEPISTERNAL SETA**). Correct recommended term to **MESOKATEPISTERNAL SETA**
- sterno-pleural group (**MESKATEPISTERNAL SETA**). Correct recommended term to **MESOKATEPISTERNAL SETA**
- sternopleural scale (**MESKATEPISTERNAL SCALE**). Correct recommended term to **MESOKATEPISTERNAL SCALE**
- sternopleural scale-patch (**MESKATEPISTERNAL SCALE**). Correct recommended term to **MESOKATEPISTERNAL SCALE**
- sternopleural seta (**MESKATEPISTERNAL SETA**). Correct recommended term to **MESOKATEPISTERNAL SETA**
- sternopleurite (**MESKATEPISTERNUM**). Correct recommended term to **MESOKATEPISTERNUM**
- sternopleuron (**MESKATEPISTERNUM**). Correct recommended term to **MESOKATEPISTERNUM**
- sternum (**MESKATEPISTERNUM**). Correct recommended term to **MESOKATEPISTERNUM**
404. Stirnauge. Delete (**OCELLUS**, A30) and add (**ANTENNAL PULSATING ORGAN**), A2
409. untere mesepisternale Borste (**MESKATEPISTERNAL SETA**). Correct recommended term to **MESOKATEPISTERNAL SETA**
- untere Sternopleuralborste (**LOWER MESKATEPISTERNAL SETA**). Correct recommended term to **LOWER MESOKATEPISTERNAL SETA**
- Unterhaar (**LOWER MESKATEPISTERNAL SETA**). Correct recommended term to **LOWER MESOKATEPISTERNAL SETA**

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upper episternal chaeta (**UPPER MESKATEPISTERNAL SETA**). Correct recommended term to **UPPER MESOKATEPISTERNAL SETA**

upper katepisternal seta (**UPPER MESKATEPISTERNAL SETA**). Correct recommended term to **UPPER MESOKATEPISTERNAL SETA**

upper mes-episternal bristle (**UPPER MESKATEPISTERNAL SETA**). Correct recommended term to **UPPER MESOKATEPISTERNAL SETA**

upper mesepisternal seta (**UPPER MESKATEPISTERNAL SETA**). Correct recommended term to **UPPER MESOKATEPISTERNAL SETA**

**UPPER MESKATEPISTERNAL SCALE**. Correct to **UPPER MESOKATEPISTERNAL SCALE**

**UPPER MESKATEPISTERNAL SETA**. Correct to **UPPER MESOKATEPISTERNAL SETA**

upper sternopleural group (**UPPER MESKATEPISTERNAL SETA**). Correct recommended term to **UPPER MESOKATEPISTERNAL SETA**

410. upper sternopleural scale patch (**UPPER MESKATEPISTERNAL SCALE**). Correct recommended term to **UPPER MESOKATEPISTERNAL SCALE**

ventrales Mesepisternum (**MESKATEPISTERNUM**). Correct recommended term to **MESOKATEPISTERNUM**

#### Additions

349. **ACROSTERNITE**, A1

350. **ANTECOSTA**, A2

351. **ANTENNAL PULSATING ORGAN**, A2

anteprenotal lobe (**ANTEPRONOTUM**), A3

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## REFERENCES NEWLY CITED

- Chaudonneret, J. 1952. Réflexions sur les prémandibules des larves de Culicidae (Diptères Nématocères). Bull. Soc. Zool. Fr. 76(5/6):399-404.
- Christophers, S.R. 1951. Note on morphological characters differentiating *Culex pipiens* L. from *Culex molestus* Forskål and the status of these forms. Trans. R. Entomol. Soc. Lond. 102(7):372-379.
- Clements, A.N. 1956. The antennal pulsating organs of mosquitoes and other Diptera. Quart. J. Microsc. Sci. 97(3):429-433.
- Colless, D.H. 1979[b]. Homologies in elements of the larval labrum in Chaoboridae and Culicidae (Diptera). J. Aust. Entomol. Soc. 18(1):21-24.
- Day, M.F. 1955. A new sense organ in the head of the mosquito and other nematocerous flies. Aust. J. Zool. 3(3):331-335.
- Ehlert, W. 1979. Die Stechmücke *Culex pipiens* L. Morphologie und Anatomie der Imago. Mikrokosmos 6:191-197.
- Goetghebuer, M. 1925. Contribution a l'étude des "prémandibules" chez les larves des Diptères Nématocères. Encycl. Entomol. 1(3):143-157.
- Harbach, R.E. and K.L. Knight. 1980. *Taxonomists' Glossary of Mosquito Anatomy*. Plexus Publishing, Inc. Marlton, New Jersey. xi + 415 pp.
- Linder, H. 1919. Über die Mundwerkzeuge einiger Dipteren und ihre Beziehungen zur Ernährungsweise. Zool. Anz. 50(1):19-27.

- Mattingly, P.F. 1971[f]. Contributions to the mosquito fauna of Southeast Asia. XII. Illustrated keys to the genera of mosquitoes (Diptera, Culicidae). Contrib. Am. Entomol. Inst. (Ann Arbor) 7(4):1-84.
- Mattingly, P.F. 1981. Medical entomology studies -- XIV. The subgenera *Rachionotomyia*, *Tricholeptomyia* and *Tripterooides* (Mabinii group) of genus *Tripterooides* in the Oriental Region (Diptera: Culicidae). Contrib. Am. Entomol. Inst. (Ann Arbor) 17(5):ii + 147 pp.
- Owen, W.B. 1980. Morphology of the abdominal skeleton and muscles of the mosquito, *Culiseta inornata* (Williston) (Diptera: Culicidae). J. Morphol. 166(2):155-178.
- Reinert, J.F. 1981. A literature review of pupal seta 13-CT in the family Culicidae (Diptera) and a report of its occurrence in *Aedes aurotaeniatus* Edwards. Mosq. Syst. 12(4):441-444.
- Stone, A. 1981. Culicidae, pp. 341-350. In J.F. McAlpine, B.V. Peterson, G.E. Shewell, H.J. Teskey, J.R. Vockeroth and D.M. Wood (Coordinators), *Manual of Nearctic Diptera*. Vol. 1. Research Branch, Agriculture Canada, Ottawa, Ontario. Monograph No. 27:vi + 674 pp.
- Uchida, K. 1979. Cibarial sensilla and pharyngeal valves in *Aedes albopictus* (Skuse) and *Culex pipiens pallens* Coquillett (Diptera: Culicidae). Int. J. Insect Morphol. Embryol. 8(3/4):159-167.
- Zaka-Ur-Rab, M. 1980. Morphology of the male terminalia of *Aedes aegypti* Linnaeus, the yellow fever mosquito. Beitr. Entomol. 30(1):9-14.