

## Corrections and other contributions to the THIRD printing of

Andersen, T., Cranston, P.S. & Epler, J.H. (sci. eds). 2013.

**The larvae of Chironomidae (Diptera) of the Holarctic Region — Keys and diagnoses.**

Insect Systematics & Evolution Supplement 66; 571 p.

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When was this entry changed?	Where does this entry apply?	What should be changed or noted there?
2014-03-03	<b>throughout the manual</b>	During the publisher's editing of some errors in earlier printings, several previously flawed references to source literature were not corrected but removed altogether. For example, the very last sentence on p. 153 previously ended with the references "(Ashe & O'Connor 2009; Sæther & Spies 2012)"; in the third printing the sentence no longer contains any reference.
2014-03-03	<b>throughout the manual</b>	The manual's "References" sections differ in the order of entries, and some individual titles are completely out of sequence. In the Chironominae chapter, for example, (most) titles by Sæther are listed with the "æ" treated as equivalent to 'ae', whereas titles by Säwedal appear as the last entries under the letter S. Moreover, taxon names in reference titles are not consistently set in <i>italics</i> .
2014-03-03	<b>throughout the manual</b>	Many references to works (co)authored by J.-J. Kieffer are made without regard to the precise bibliographic data provided in Ashe & O'Connor (2009, 2012; World Catalogue Parts 1 and 2) and in Ashe & Spies (2011; Kieffer bibliography in Proc. 17th Int. Symp. Chir., Nankai Univ.: p. 3-14). As a result, the manual misrepresents various data on Kieffer's works, e.g. concerning their chronological sequence of publication, title wording, etc.
2014-03-03	<b>throughout the manual</b>	The reproduction quality of the illustrations within a given printing varies from normal to very poor among the individual figures of single plates, and also between entire plates. Analogous variation occurs between the manual's different printings. For example, in the first printing Figs 10.9 and 10.18 look fine, whereas in Fig. 10.71 nearly all lines are too fuzzy. In the third printing Fig. 10.71 is OK, whereas Figs 10.9 and 10.18 have fuzzy lines accompanied by gray clouds.

When was this entry changed?	Where does this entry apply?	What should be changed or noted there?
2014-03-03	throughout the manual	Some of the publisher's modifications since the previous printing have resulted in substantially different page layout, but the index has not been updated quantitatively. For example, under "Thienemanniola Kieffer" the <i>Comments</i> section has shifted from p. 455 to p. 456; the name <i>Biwatendipes</i> is mentioned in that section but its index entry still refers to p. "455".
2014-03-03	throughout the manual	In the original edition of the manual (1983; Ent. scand. Suppl. 19) the index includes page-number references to taxon names in the keys, and this feature has been very useful. Unfortunately, the new manual's index appears to be lacking most such key page numbers.
2014-03-03	throughout the manual	A number of improvements suggested below imply a corresponding modification to be made in the index. However, <u>these</u> index changes are <u>not</u> itemized below.

#### TERMINOLOGY & KEYS

2023-01-12	p. 14	Right column, line 20 should end: ... chironomid larvae have
2015-04-17	p. 16	In the section on " <i>The chironomid larval body</i> ", second sentence should start: An apparent subdivision of some segments, ...

#### TANYPODINAE

2016-03-04	p. 33	Left column, line 3, "Lundbeck" should be (Lundbeck)
2015-11-03	p. 40	In the subfamily diagnosis for Tanypodinae larvae, large parts of the intended last paragraphs are missing. Please see the separate PDF file, in which the missing texts are highlighted in yellow.
2014-03-03	p. 40, 50	The tribe name Coelotanypodini is invalid as a junior synonym; the valid name is Clinotanypodini.
2014-03-03	p. 41	Couplet 4, line 4, tribe name should read Tanypodini (see, e.g., Spies 2005 in Zootaxa 894).
2015-11-03	p. 41	Couplet 17, line 1 should begin: Basal <b>segment of</b> maxillary palp with ...

When was this entry changed?	Where does this entry apply?	What should be changed or noted there?
2014-03-05	p. 42	Key couplet 18 contains a substantial error and confusing terminology. The couplet should read as follows: 18(17). Maxillary palp basal segment divided in 2 unequal parts, with proximal part $\frac{1}{2}$ half length of distal part (Fig. 5.30 G); pseudoradula broadened posteriorly, granulation diffuse. ... <i>Paramerina</i> (p. 70) — Maxillary palp basal segment divided in 2–6 parts, if only 2 then parts subequal in length (Fig. 5.21 I) or proximal part > half length of distal part (note that in palps with more than 2 parts to the basal segment, the most proximal part may be very small); pseudoradula not broadened posteriorly, granulation often in longitudinal rows. .... <i>Ablabesmyia</i> (p. 61)
2016-03-04	p. 43	Couplet 40, lower alternative should end: (Fig. 5.21)
2016-03-04	p. 43	Couplet 42, lower alternative should end: ... with about 20-22 teeth.
2016-03-04	p. 43	Couplet 43, lower alternative should read: Gular margin of head usually brown; posterior parapods with 5 smaller claws thickened and darker; (pupal thoracic horn usually without plastron, with or without corona). Holarctic.
2014-03-03	p. 43	A note should be inserted above the " <i>Alotanypus</i> Roback" heading, to signal and explain that this chapter presents the genus diagnoses in an unusual and non-intuitive 3-part sequence: the first part treats the genera in all tribes except Pentaneurini; the second part treats the pentaneurine genera outside of the ' <i>Thienemannimyia</i> group'; the third part the genera in the ' <i>Thienemannimyia</i> group'.
2014-03-03	p. 43	First reference under " <i>Alotanypus</i> " heading should read Roback, 1971:95.
2014-03-03	p. 43	Reference title "Roback 1978" should read 1978a.
2016-03-04	p. 44	Under " <i>Ecology and distribution</i> ", the two sentences from section lines 7 to 11 should be replaced as follows: The complete metamorphosis of <i>A. aris</i> Roback, known from many states in the south-eastern U.S.A., was treated by Roback (1987a), who also discussed the pupa of a possible third Nearctic species.
2014-03-03	p. 45	Reference title "Roback 1978" should read 1978a.
2014-03-03	p. 47	Reference title "Roback 1978" should read 1978a.

When was this entry changed?	Where does this entry apply?	What should be changed or noted there?
2014-03-03	p. 50	Reference title "Roback 1971a" should read 1971.
2014-03-03	p. 50	Reference title "Roback 1978" should read 1978a.
2014-03-03	p. 51	Reference title "Roback 1978" should read 1978a.
2015-02-18	p. 51	Right column, first paragraph, last sentence should read Setae SSm, S8-S10 multibranching, others simple.
2017-06-08	p. 52	" <i>Ecology and distribution</i> " paragraph, lines 7-9, delete the part of the sentence from "but pupal exuviae" to "south-west China" [according to records at ZSM, the collecting locality in Yunnan clearly lies in the Oriental region]
2018-10-28	p. 52	" <i>Ecology and distribution</i> " paragraph, lines 11-12; the sentence should read: Most species of <i>Djalmabatista</i> are known from the Neotropics, in which at present 12 named and perhaps many more species occur. [In 2013, there were 10 (rather than only "6") named Neotropical species; see Dantas & Hamada (2017) in <i>Zootaxa</i> 4250(4).]
2014-03-03	p. 53	Reference title "Roback 1978" should read 1978a.
2014-03-03	p. 57	Reference title "Roback 1978" should read 1978a.
2014-03-03	p. 59	First reference under "Tanypus" heading should read Meigen, 1803:261.
2014-03-03	p. 61	Left column, top heading should read Tribe Pentaneurini.
2015-02-18	p. 61	First sentence on the <i>Maxilla</i> should begin Basal segment of palp with 2–6 separate sections ...
2015-11-03	p. 62	In the synonym list under <b>Denopelopia</b> , add: <i>Yaequintus</i> Sasa & Suzuki, 2000:24; Kobayashi & Endo (2008)
2015-04-17	p. 63	" <i>Ecology and distribution</i> " of <i>Denopelopia</i> , last line, change "(Cheng & Wang 2005)" to ...2005b
2016-03-04	p. 67	Right column, line 7, literature reference should read: (Roback 1987b)
2014-03-03	p. 67	Second reference under "Larsia" heading should read Beck & Beck 1966.

When was this entry changed?	Where does this entry apply?	What should be changed or noted there?
2015-11-03	p. 70	<b>Note</b> that <i>Paramerina</i> Fittkau has been made a subgenus of <i>Zavrelimyia</i> Fittkau by Silva & Ekrem (2015) in Systematic Entomology (DOI: 10.1111/syen.12141).
2015-02-18	p. 71	First sentence on the <i>Maxilla</i> should begin Basal segment of palp with 2 separate sections ...
2014-03-03	p. 72	Third reference under <b>Pentaneura</b> should read Roback 1971.
2015-02-18	p. 72	Second sentence on <i>Body</i> should begin Anal tubules usually long ...
2015-02-18	p. 72	Last sentence under <i>Comments</i> should read: <i>Pentaneura inyoensis</i> , which has ... , ... of the ligula, but no long anal tubules, extends the larval generic diagnosis.
2014-03-03	p. 74	End of first reference under "Telopelopia" heading should read 1971:255.
2015-04-17	p. 76	"Ecology and distribution" of <i>Trissopelopia</i> , line 5, change " <i>T. longimana</i> " to <i>T. longimanus</i> ; lines 6-7, delete the part of the sentence from ", where" to the full stop [the name <i>T. oyabetrispinosa</i> Sasa et al., 1988 has been synonymised with <i>T. longimanus</i> by Kobayashi & Endo (2008)]; line 5 from bottom should begin: (Cheng & Wang 2005a); last sentence should begin: Outside of the northern hemisphere there are additional records of <i>Trissopelopia</i> from the Afrotropical region (Harrison 1978 in J. Ent. Soc. S. Africa), from the Oriental region (e.g., Hazra & Chaudhuri 2010 in Graellsia), and pupal ...
2015-11-03	p. 77	Under <b>Zavrelimyia</b> , add as the second synonym line: <i>Paramerina</i> Fittkau, 1962:317; Silva & Ekrem 2015. [See also the comment on page 70 above.]
2015-11-03	p. 78	<i>Comments</i> , lines 12-10 from bottom: Epler's (2001) suggestion of <i>Reomyia</i> as a subgenus of <i>Zavrelimyia</i> has been adopted by Silva & Ekrem (2015) in Systematic Entomology (DOI: 10.1111/syen.12141).
2014-03-03	p. 81	First reference under <b>Conchapelopia</b> should read Fittkau, 1957:317.
2015-11-03	p. 81	<b>Note</b> that <i>Helopelopia</i> Roback, listed here as a subgenus and synonym of <i>Conchapelopia</i> , is returned to separate genus status by Silva & Ekrem (2015) in Systematic Entomology (DOI: 10.1111/syen.12141).

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2015-11-03	p. 83	<i>Comments</i> , second sentence should begin: In the latter it falls into the subgroup ...
2014-03-03	p. 85	Left column, first paragraph: Reference to "Spies et al. 2008" should read 2009.
2014-03-03	p. 85	The " <i>Commnts</i> " heading should read <i>Comments</i> .
2016-03-04	p. 86	Under " <i>Diagnosis</i> ", second sentence should read Head brownish, posterior margin usually dark brown (except in <i>T. barberi</i> (Coquillett), <i>T. senata</i> (Walley)); ...
2015-04-17	p. 87	" <i>References</i> ", last line, change "2005" to 2005b; see also p. 89.
2014-03-03	p. 88	Additional reference titles: Fittkau, E. J. 1968. Eine neue Tanypodinae-Gattung, <i>Djalmabatista</i> (Chironomidae, Dipt.), aus dem brasilianischen Amazonasgebiet. — Amazoniana 1:327–349. Fittkau, E. J. & Murray, D. 1988. <i>Bethbilbeckia floridensis</i> : a new genus and species of Macropelopiini from the South Eastern Nearctic (Diptera: Chironomidae). — Spixiana Supplement 14:253–259.
2015-04-17	p. 89	The entry "Ming, C. & Wang, X. 2005" should be corrected to Cheng, M. & Wang, X. 2005a, and moved to p. 87 above Cheng & Wang 2005b.
2016-03-04	p. 90	Additional reference titles: Roback, S. S. 1974. The immature stages of the genus <i>Coelotanypus</i> (Chironomidae: Tanypodinae: Coelotanypodini) in North America. — Proceedings of the Academy of Natural Sciences of Philadelphia 126:9–19. Roback, S. S. 1987a. The immature stages and female adult of <i>Alotanypus aris</i> Roback with a redescription of the male adult (Diptera: Chironomidae: Macropelopiini). — Notulae Naturae 466:1–8.
2016-03-04	p. 90	Reference titles "Roback, S. S. 1978" and "Roback, S. S. 1987" should read 1978a and 1987b, respectively.
2014-03-03	p. 90	Additional reference title: Roback, S. S. 1978b. New name for <i>Brundinia</i> Roback nec <i>Brundinia</i> Tottenham. — Entomological News 89:141.

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2014-03-03	p. 90	Reference title "Spies, M., Andersen ... 2008" should read 2009.
2015-11-03	p. 92	Figure caption, item I: Replace " <i>Thienemannimyia</i> Fittkau" with <i>Tanytus</i> Meigen.
2015-11-03	p. 93	Figure caption, item H: Author's name should read Philippi.
2015-04-17	p. 126	Figure caption, last line 5, change " <i>T. longimana</i> " to <i>T. longimanus</i>
2014-03-03	p. 131	Subfigure labels C and D need to be switched.
2016-03-04	p. 136	Figure caption, line 2, delete blank space between "Mandi" and "ble"

DIAMESINAE		
2019-07-13	p. 149	In the diagnosis for <i>Diamesa</i> Meigen, right column, above " <i>Mentum</i> . ...", the entire paragraph on the mandible is missing, as it was in the manual's first edition already (Oliver in Wiederholm 1983: 118). The following attempt has been compiled from data in Oliver (1983), Epler (2001: 5.4), Makarchenko (2006: 611 in <i>Opredelitel' Nasekomykh Dal'nego Vostoka Rossii</i> 6, 4) and Rossaro & Lencioni (2015: 63 in <i>Eur. J. Envir. Scis</i> 5, 1): <i>Mandible</i> . With apical tooth and usually 4 inner teeth, all subject to strong abrasion; among the inner teeth, 1, 2, or 3 of the more distal ones can be larger than the respective remainder, and subequal to or even larger than the apical tooth (e.g., Fig. 7.5 A–D. Seta subdentalis small, simple. Seta interna present, of about 15–40 simple branches.
2018-10-28	p. 152	<i>Pothastia longimanus</i> group Kieffer, " <i>Mentum</i> " paragraph, text should begin: Anteroventral margin without teeth. No ventromental plates apparent, but anterior margin of mentum may be formed by fused ventromental plates. ...
2018-10-28	p. 154	Left column: In the " <i>Pseudodiamesa Goetghebuer</i> " heading, the author's name should not be set in italics. In the " <i>Mentum</i> " paragraph, line 6, "ventrolateral" should be replaced with ventromental.
2018-10-28	p. 156	<i>Sympothastia</i> Pagast, " <i>Mandible</i> " paragraph, line 4: "seta interior" should be replaced with seta interna.

When was this entry changed?	Where does this entry apply?	What should be changed or noted there?
2014-03-03	p. 159	Reference title 'Sæther & Spies 2011' should read 2012. <b>NOTE</b> that a number of Chironomidae data in the "Fauna Europaea" database have been updated since 2012, thus are no longer shown online as they were in version 2.5.
2014-04-24	p. 166	The caption to Fig. 7.6 ( <i>Diamesa</i> III) fails to state which species are illustrated in subfigures E-H (labral "S setae").
2020-08-28	p. 173	Caption to Fig. 7.13: from the end line 2 onward, the entries should read: ... — A, E, I. <i>P. (Pseudodiamesa) branickii</i> (Nowicki); B–D, G, H. <i>P. (Pachydiamesa) arctica</i> (Malloch); F. <i>P. (Pseudodiamesa) pertinax</i> (Garrett). [found by Dean Hansen (Minnesota, USA)]
2018-10-28	p. 174	Caption to Fig. 7.14: replace "Zav?el" with Zavřel.

ORTHOCLADIINAE		
2014-03-03	p. 189	Abstract, line 10 from bottom, last word should read <i>Corynoneurella</i> .
2015-02-18	p. 191	Key couplet 5, lower alternative should read Anal tubules present or absent. Never marine. .... . 11 [See, e.g., the diagnosis for <i>Symbiocladius</i> .]
2016-03-04	p. 191	Key couplet 12, upper alternative, fourth character should read: Premandible simple.
2016-03-04	p. 191	Key couplet 14, upper alternative, second sentence should read: Antenna with only three segments, the terminal segment shorter than the preceding one.
2016-03-04	p. 191	Key couplet 15, upper alternative, third sentence should read: Antennal blade extending far beyond flagellum, 2–4x as long as width ...  Key couplet 15, lower alternative, third sentence should read Antennal blade about as long as width of basal segment, at most moderately extending beyond flagellum (e.g., Figs 9.5D, 9.39B).

When was this entry changed?	Where does this entry apply?	What should be changed or noted there?
2016-03-04	p. 191	Key couplet 16, upper alternative, fourth line should begin: on mentum, then antennal blade ...  Key couplet 16, upper alternative should begin: Mandible with 3 inner teeth, or when with 4 teeth, then ...
2017-11-15	p. 192	Left column, first line should begin: then mentum ...
2017-11-15	p. 193	Key couplet 42 should end: ..... 57 (rather than 5 7)
202-08-28	p. 194	Right column, line 2 from bottom (in couplet 60, upper alternative) should read: ventromental plate. .... 61
202-08-28	p. 195	Left column, line 1 (in couplet 60, lower alternative) should read: near posterior margin of ventromental plate or more
2017-11-15	p. 196	Left column, bottom line should end: ... S I bifid ..... 85
2015-02-18	p. 199	Left column, third line from bottom: insert a comma between "outer" and "fifth"
2015-02-18	p. 200	Right column, first sentence on <i>Mentum</i> should begin: Distinctive, with ventromentum apparently forming a single, medially uninterrupted plate, in ventral view completely covering the paired dorsomentum; ...
2017-11-15	p. 205	Under <b>Bryophaenocladus</b> , " <i>Antenna</i> " paragraph, lines 2-4 should read: lengths; either second segment longer than first while fourth longer than third, or first and second subequal while third and fourth subequal. ...
2019-07-13	p. 208	Chaetocladus Kieffer, <i>Comments</i> paragraph: in line 9, "differs" should read differ; in line 13, "larval" should read labral; in line 14, "lamellae" should read lamella; the entire last sentence should be replaced as follows: <i>Thienemannia</i> shows a combination of plumose S I setae and weak ventromental plates not observed in <i>Chaetocladus</i> .
2017-11-15	p. 209	Left column, note 1 below the key: figure references in lines 2 and 5 should read (Fig. 9.12B) and (Fig. 9.13F), respectively
2015-11-03	p. 212	Under <b>Cricotopus</b> , add as the second synonym line: <i>Paratrichocladus</i> Santos Abreu, 1918:204; Cranston & Krosch 2015. [See also the comment on page 245 below.]

When was this entry changed?	Where does this entry apply?	What should be changed or noted there?
2017-11-15	p. 212	Under <b>Cricotopus</b> , " <i>Mentum</i> " paragraph ends "beard very weak or vestigial." <b>NOTE</b> that this refers to a cardinal beard (on the maxillary cardo), not to a ventromental beard; see Hirvenoja (1973), Sæther (1980).
2017-11-27	p. 214	Key couplet 10, upper alternative should begin: Antennal ratio > 2; and lower alternative should begin: Antennal ratio < 2. [The erroneous printed values were copied from Hirvenoja (1973), whose definition of the larval antennal ratio was the inverse of the ratio in current use since Sæther (1980).]
2018-10-28	p. 221	Euryhopsis Oliver, " <i>Ecology and distribution</i> " paragraph, second sentence should read: The genus is known from the Nearctic and Palearctic regions.
2017-11-15	p. 222	Right column should end: ... setae present.
2017-11-15	p. 224	Under <b>Heleniella</b> , " <i>Antenna</i> " paragraph, line 2: delete the text "second segment longer than basal segment;" — see Fig. 9.35B, which is correct.
2017-11-15	p. 226	Under <b>Hydrobaenus</b> , " <i>Mentum</i> " paragraph, line 4 should read: ... setae have been ...
2017-11-15	p. 233	Left column, bottom paragraph, first sentence should read: The respective descriptions of the larva and the male of " <i>Limnophyes flexuella</i> (Edwards) by Strenzke (1950c) do not treat the same species. AND right column, first line should end: ... of the larva is correct,
2017-06-08	p. 238	Left column, line 4 from bottom, between "Chaetulae laterales" and "usually simple", add: usually 4, but 9 in <i>O. (Euorthocladus) rivulorum</i> (see Sponis 1990: 9), Right column, " <i>Mentum</i> ." line 2: "7–9" should be 7–10 Sponis (1990)
2022-09-14	p. 239	Right column, third line from bottom: "(1935b)" should be (1935a)
2022-09-14	p. 242	Under <b>Parakiefferiella</b> , " <i>Antenna</i> " paragraph, line 3: "third segment shorter than the fourth." <b>NOTE</b> that this does not apply to all species; see Potthast (1914), Wülker (1957), Epler (2001).
2019-07-13	p. 242	Parakiefferiella Thienemann, <i>Mentum</i> paragraph, transition from line 2 to 3 should read: ... however, showed a single ...

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2015-02-18	p. 244	Right column, third sentence on <i>Body</i> should begin: Anal segment ...
2022-09-14	p. 244	<b>Paraphaenocladus</b> , " <i>Comments</i> " paragraph: line 8: delete the hyphen [-] at the end of the line line 11: insert a full stop [.] behind "(>300 µm)"
2015-11-03	p. 245	<b>Note</b> that <i>Paratrichocladus</i> Santos Abreu has been made a subgenus of <i>Cricotopus</i> van der Wulp by Cranston & Krosch (2015) in <i>Systematic Entomology</i> 40(4): 719–732.
2015-02-18	p. 249	Right column, second sentence under <i>Comments</i> : "combines" should read combine
2015-02-18	p. 252	Right column, eighth line on <i>Antenna</i> : delete "as long as" in front of "2–4x as long"
2015-02-18	p. 260	Right column, last paragraph, first line: "Larva" should read Larvae
2023-01-12	p. 264	Left column, " <i>Comments</i> " on <i>Thalassosmittia</i> , text lines 5-10: Some arguments for separate generic status of <i>Th. atlantica</i> are not convincing; the "tooth-like ventromental plates" are not "unique" (see Strenzke & Remmert 1957 on <i>Th. thalassophila</i> ), and published diagnoses of the pupa differ in the recognition of abdominal conjunctives and/or their precise delimitation from adjacent areas
2022-09-14	p. 265	Left column, " <i>Diagnosis</i> " for <i>Thienemanniella</i> : Second paragraph ( <i>Antenna</i> ) should read: With 5 segments; 1/2 to 3/4 length of head; third segment usually long (except in <i>T. acuticornis</i> (Kieffer), where third segment is shorter than Lauterborn organs); fourth and fifth segments small. <b>Second</b> segment frequently darkened (pale in <i>T. acuticornis</i> ). Mark of insertion of seta distinct on basal segment. Blade short. Lauterborn organs usually small (relatively large in <i>T. acuticornis</i> ). Seventh paragraph ( <i>Body</i> ): The synonymy " <i>T. acuticornis</i> (Kieffer) (= <i>T. fusca</i> (Kieffer))" is not beyond doubt
2019-07-13	p. 268	Right column, line 15 from bottom, after "thus appearing striated.", a new paragraph should begin: <i>Maxilla</i> . Palpiger with ...

When was this entry changed?	Where does this entry apply?	What should be changed or noted there?
2015-02-18	p. 272	Left column, <i>Comments</i> should read: The unique larva shows some semblance to those in <i>Acamptocladius</i> as it appears to have a simple, medially uninterrupted ventromentum that carries antero-medial teeth.
2014-03-03	p. 283	Reference title 'Sæther, Ashe & Murray' should be moved to the preceding page, above 'Sæther & Cranston'.
2015-02-18	p. 285	Three reference titles – 'Wang, Andersen & Sæther 2006', 'Wang, Liu & Epler 2004', and 'Wang, Sæther & Andersen 2002' – should be moved to their respective proper places.
2023-01-12	p. 344	Fig. 9.57A for " <i>P. niger</i> (Kieffer)" – which was modified from fig. 4B in Sæther (1980b) – shows basal rings of the <b>setae submenti</b> located between the ventromental plates. However, all 12 larvae studied by Sæther (ex coll. Thienemann) have the SSm arising well posterior of the ventromental plates. The latter condition is the one illustrated for <i>P. niger</i> in Schmid (1993: fig. 100G) and Moller Pillot (2013: fig. 11 on p. 182). In fig. 9.57E (from Sæther 1980: fig. 4F) the premandible is without the "single serrate seta" that Andersen et al. (2013: 241) diagnosed as replacing the <b>premandibular brush</b> in some <i>Paracricotopus</i> species. The authors did not give examples of such setae, but they are present on the larvae described as <i>P. niger</i> in Sæther (1980b).
2015-02-18	p. 386	The rectangular frame at the top of this otherwise blank page should be removed.

CHIRONOMINAE		
2014-03-03	p. 387, 389	Wherever <i>Carbochironomus</i> is mentioned with its nomenclatural authorship, the name of the second author should read Kirschbaum.
2014-03-03	p. 387 / 389	The larva of <i>Mongolchironomus</i> is listed as unknown in the chapter abstract (p. 387), but not in the introductory text above the key to genera (p. 389). See also the following comment.

When was this entry changed?	Where does this entry apply?	What should be changed or noted there?
2014-03-03	p. 387, 394, 403-404, 476	<p>The treatment of <i>Cryptotendipes</i> omits the larva of <i>C. acalcar</i> Reiss, 1990 (in Spixiana 13: 209-215.) and its considerable differences from the manual's diagnosis for <i>Cryptotendipes</i>.</p> <p>The larva of <i>Mongolchironomus</i> is said to be unknown, as Sasa &amp; Suzuki (1997 in Japan. J. Trop. Med. Hygiene 25: 149-189) described adult males only.</p> <p>However, strong similarities in adult morphology and between the respective collecting areas suggest that <i>C. acalcar</i> is congeneric with <i>Mongolchironomus</i> (or consubgeneric, if <i>Mongolchironomus</i> is treated as a subgenus in <i>Cryptotendipes</i>). Quite conceivably even, <i>C. acalcar</i> may be a senior synonym to one of Sasa's &amp; Suzuki's two species names in <i>Mongolchironomus</i>.</p>
2015-02-18	p. 388	<p>Subfamily diagnosis, <i>Labro-epipharyngeal region</i>: The labral lamella is absent also in some taxa outside of the <i>Harnischia</i> complex, e.g. in <i>Pentapedilum nubens</i> Edwards, 1929.</p>
2015-02-18	p. 389	<p>Key couplet 6, upper alternative: insert a blank space between "notch" and "(Fig. 10.68A)".</p>
2015-02-18	p. 390	<p>Couplet 14, upper alternative, penultimate line should end: ... of segment 2, <b>the</b> other distally (Fig.</p>
2017-06-08	p. 390	<p>Couplet 14, lower alternative, last sentence should read: Lauterborn organs either sessile and opposite at apex of segment 2, or with short pedicel arising at apex of segment 3 (Fig. 10.70C), or inconspicuous.</p>
2018-10-28	p. 390	<p>Couplet 20, upper alternative, line 3: delete the term "(Fig. 10.88B)".</p>
2015-02-18	p. 390	<p>Couplet 25, first line should end: as long <b>as</b> or</p>
2016-03-04	p. 391	<p>Couplet 33, upper alternative, line 3 should read: usually present and well-developed (Fig. <b>10.7D</b>).</p> <p>Couplet 33, upper alternative, lines 5 to 6 should read: 10.8E) or divided in 3 plates that are usually toothed (Fig. 10.20I), rarely finger-like (Fig. 10.56D). Dorsal tooth of</p>
2016-03-04	p. 391	<p>Couplet 33, lower alternative, line 3, figure reference should read: (Fig. 10.4<b>6E</b>)</p>
2016-03-04	p. 391	<p>Couplet 34, lower alternative, line 2 should begin: and nearly meeting medially. ...</p>

When was this entry changed?	Where does this entry apply?	What should be changed or noted there?
2016-03-04	p. 392	<p>In couplet 37, a third alternative should added in between the upper (<i>Hyporhygma</i>) and the lower one, as follows:</p> <p>— Mentum often very dark. Otherwise as above, except frons and clypeus fused to form frontoclypeus with straight anterior margin and long, strong constriction in the stretch that includes the origins of setae S4.</p> <p>.....</p> <p>..... <i>Polypedilum</i> (part; p. 430) [at least 2 species in the Nearctic (e.g. Epler 2001: p. 8.126, key couplet 2, and p. 8.129, couplet 10), at least 1 undetermined Palaearctic species]</p>
2017-11-27	p. 392	<p>Couplet 38, lower alternative, lines 2 to 3: figure reference should read: (Fig. 10.22A)</p>
2014-03-03	p. 392	<p>Couplet 42, line 4, figure reference should read 10.27A.</p>
2016-03-04	p. 392	<p><b>Couplet 44: Many specimens have to be keyed both ways from here.</b> The numbers of premandible teeth given are contradicted by some diagnoses of genera in the respective subsequent key brackets, and it is unclear how far apart the ventromental plates must be to be keyed as "not contiguous medially" (contiguous ≠ touching).</p>
2016-03-04	p. 393	<p>Couplet 48 needs to be replaced as follows:</p> <p>48(44). Mandible with 2 free-standing inner teeth.  Clypeus at least partially fused to frons. Penultimate body segment with 1 pair of ventral tubules (?absent in <i>D. brachialis</i>). Larvae mining in sponges, bryozoans or plants. ....</p> <p><i>Demeijerea</i> (p. 404)</p> <p>— Without the above combination of characters; if mandible with only 2 free-standing inner teeth and clypeus fully fused with frons (many <i>Polypedilum</i> spp.), then ventral tubules absent. ....</p> <p>49</p>
2016-03-04	p. 393	<p>Couplet 49, upper alternative, should begin:  Individual ventromental plate ...</p> <p>Couplet 49, lower alternative, should begin:  Individual ventromental plate usually as wide as, or wider than, mentum (Fig. 10.26A; but see also Fig. 10.52A). ...</p>

When was this entry changed?	Where does this entry apply?	What should be changed or noted there?
2016-03-04	p. 393	<p>In couplet 49, a third alternative is necessary in between the upper (<i>Dicrotendipes</i>) and the lower one, as follows:</p> <p>— Individual ventromental plate narrower than mentum. Pecten epipharyngis of 3 separate scales. Frons and clypeus separate. Labral lamella absent. Mentum with pair of large and wide median teeth (inseparable when strongly abraded) and six pairs of laterals sloping to posterior. .... <i>Nubensia nubens</i> (Edwards) [not treated in Epler et al. (2013); see Spies &amp; Dettinger-Klemm (2015) in ZOOTAXA 3994(1).]</p>
2016-03-04	p. 393	<p>Couplet 50, upper alternative: Delete "Fig. 10.16A, C, ", as it refers to <i>Dicrotendipes</i>, which is not in the key bracket this couplet leads to.</p>
2016-03-04	p. 393	<p>Couplet 53, upper alternative, should be reworded as follows:</p> <p>53(49). Medial ends of ventromental plates extended to anterior, each linked to the outer base of a median mentum tooth; thus, mentum with median (ventromental) teeth clearly delimited from lateral (dorsomental) teeth (Figs 20A, 21A). ..... 54</p>
2016-03-04	p. 393	<p>Couplet 54, upper alternative, first sentence should read: Mandible with deep incision between proximal-most inner tooth and distal end of mola.</p> <p>Couplet 54, upper alternative, first sentence should read: Mandible without such incision.</p>
2016-03-04	p. 393	<p>Couplet 58, upper alternative, should end: ... and semilunate). ..... 59</p>
2016-03-04	p. 394	<p>Couplet 61, upper alternative, should end: anterior end of the latter with laterally projecting lobes and with straight anterior margin (Figs 10.53E, 55E). ..... <i>Polypedilum</i> (part) (p. 430)</p>
2016-03-04	p. 394	<p>Couplet 62, upper alternative, line 3 should end: ...; first lateral tooth taller than or equal to 2nd;</p> <p>Couplet 62, lower alternative should end: ... <i>Tribelos</i> (part) (p. 437)</p>

When was this entry changed?	Where does this entry apply?	What should be changed or noted there?
2014-06-24	p. 394	Couplet 63, upper alternative: Last line should start with 10.69B) ...
2018-10-28	p. 394	Couplet 64, upper alternative: In <i>Cryptochironomus ussouriensis</i> (Goetghebuer), the median tooth of the mentum is not "pale" but as dark as the lateral teeth. This species – which is so 'aberrant' in <i>Cryptochironomus</i> s. str. that it may have to be placed in another genus – is widely distributed in the Palaearctic region but is not represented in the 2013 manual. All life stages have been described by Shilova (1959) in Trudy Inst. Biol. Vodokhran 2: 109-116.
2018-10-28	p. 394	Couplet 64, upper alternative, line 4: In the bracketed term, delete the "9" behind "Fig. 10.15A".
2018-10-28	p. 394	Couplet 65, lower alternative, line 1 should end: ... Mentum with 4–7 pairs of [See the diagnosis for <i>Gillotia</i> on p. 411.]
2014-03-03	p. 395	A footnote or text paragraph connected to the "Tribe Chironomini" heading should explain that this part of the chapter includes <i>Manoa</i> and <i>Pseudochironomus</i> . Due to long-standing classification, and to the chapter's own key couplet 34 (p. 391), most readers would expect to find those two genera in a separate section under a heading 'Tribe Pseudochironomini'.
2014-03-03	p. 396	Under "Axarus Roback", the reference should read 1980:32.
2018-10-28	p. 397	Axarus Roback, " <i>Ecology and distribution</i> " section, second paragraph should read: Four named species are known from North America; <i>A. fungorum</i> Albu, 1980 has been described from Europe and recorded in Oriental China (Lin et al. 2012 in <i>Evraziatsk. ent. Zh.</i> 11(2)). More than a dozen additional species, some of them formally unnamed, are known from the Neotropical, Oriental and Australasian regions, respectively.
2014-03-03	p. 400	Under "Chironomus Meigen", the "? <i>Fleuria</i> " line should end: Kieffer, 1924.
2015-07-18	p. 400	"Chironomus Meigen", <i>Diagnosis, Mandible</i> : The diagnosis of "usually 3 inner teeth ..." is misleading, as the occurrence of fewer than 3 inner teeth is not limited to the exceptions listed there. For example, Epler (2001) keyed several Nearctic morphotypes of <i>Chironomus</i> s. str. with only 2 inner teeth.

When was this entry changed?	Where does this entry apply?	What should be changed or noted there?
2015-07-18	p. 401, 473	"Chironomus Meigen", <i>Comments, Fleuria</i> : "Treatment here of <i>Fleuria</i> with <i>Chironomus</i> in a broad sense should not be taken as implying synonymy." In contrast, however, <i>Fleuria</i> is treated as a subgenus of <i>Chironomus</i> in in the caption to Fig. 10.8 on p. 473.
2014-03-03	p. 402	Under "Cladopelma Kieffer", the first reference should read Kieffer, 1921a:273, 274 The two errors in "Kieffer, 1921c:277" were not there yet in the first printing. At the same time, the chapter's "References" section in the third printing only has the titles 'Kieffer 1921a' and 'Kieffer 1921b' (p. 461), whereas 'Kieffer 1921c', present in the first printing, has been removed.
2014-03-03	p. 402	In the key to "Species groups of <i>Cladopelma</i> " (and wherever else necessary), the two old group names by Lenz need to be replaced, as the species names in them cannot be used as valid. Consequently, the ' <i>laccophilum</i> (not " <i>laccophila</i> ") group' should be called <i>viridulum</i> group, and the ' <i>laterale</i> (not " <i>lateralis</i> ") group' should be called <i>goetghebueri</i> group. See, e.g., p. 77–78 in Moller Pillot, H.K.M. (2009), <i>Chironomidae larvae II</i> . KNNV Publishing, Zeist (NL).
2018-10-28	p. 402	Cryptochironomus Kieffer, "Antenna" paragraph, line 2 from bottom: In <i>Cryptochironomus ussouriensis</i> (Goetghebuer), the ring organ is not located in the "basal" half of the basal segment but beyond mid-length of the latter. For more on this species, see the corresponding comment on page 394 above.
2018-10-28	pp. 402-403, 405, 411	The diagnostic texts concerning antennal accessory blades, styles and Lauterborn organs in <i>Cryptochironomus</i> , <i>Demicryptochironomus</i> and <i>Gillotia</i> do not interpret consistently what is shown the corresponding figures. For example, Fig. 10.10B for <i>Cryptochironomus</i> shows an appendage on the apex of antennal segment 2 that is diagnosed as the "accessory blade", and a peg at the apex of segment 3 that is not mentioned in the diagnosis; Fig. 10.15B for <i>Demicryptochironomus</i> shows similar structures on segments '3' and '5' [2 and 3, if both segments are considered as secondarily subdivided in this case], but these were interpreted as a "strong style" and something "similar" to a "Lauterborn organ", respectively; Fig. 10.23B for <i>Gillotia</i> shows two structures like those in Fig. 10.10B, but in this genus they were diagnosed as the "accessory blade" and "style".

When was this entry changed?	Where does this entry apply?	What should be changed or noted there?
2015-04-17	p. 405	<p>"Comments", second paragraph, first sentence should read:            In the nominotypical subgenus, the larva of <i>D. (D.) vulneratus</i> Zetterstedt, the only European representative, was described by Lenz (1960, sub <i>D. ploenensis</i>).            Third sentence should read: Epler (2001) keyed 4 larval morphotypes from SE USA, including <i>D. (Irmakia) cuneatus</i> (Townes). Second line from bottom should read: Mediterranean (Reiss 1988a), and from ...</p>
2015-04-17	p. 406	<p>Left column, line 2, insert a comma behind "obs.)".            "Ecology and distribution" should begin: Members of both subgenera are known from the Palaearctic and Nearctic regions.</p>
2017-06-08	p. 406	<p>Right column, first sentence under "Comments" should begin: <i>Dicrotendipes</i> larvae have the frons and clypeal sclerite separate (with 1 exception, <i>D. lobiger</i> (Kieffer)), ...</p>
2014-03-03	p. 406	<p>Under "Einfeldia Kieffer", the first reference should read Kieffer, 1924:393.</p>
2017-06-08	p. 407	<p>Left column, "Mentum." paragraph, line 5 should begin: tooth; anterior margin smooth, ..</p> <p>Right column, last "Comments." paragraph and "Ecology and distribution.":</p> <p>These texts still include in <i>Einfeldia</i> sensu stricto several species that have been removed either before or since.</p> <p>(A) Examination of type material has resulted in <i>Chironomus dilatatus</i> Goetghebuer (name invalid, replaced by <i>Einfeldia palaeartica</i> Ashe) being reassigned as <i>Chironomus (Lobochironomus) palaearticus</i> (Ashe) (Sæther† &amp; Spies 2013 in Fauna Europaea version 2.6).</p> <p>(B) <i>Einfeldia kanazawai</i> Yamamoto and <i>E. ocellata</i> Hashimoto have been transferred to <i>Chironomus</i> by Yamamoto, M. et al. (2015 in Eur. J. Envir. Scis 5/1).</p> <p>(C) The data available on <i>Einfeldia nojiriprima</i> Sasa – a possible synonym of <i>Tendipes (Einfeldia) chelonia</i> Townes according to Yamamoto &amp; Yamamoto (2014 in Catalogue Insects Japan. Vol. 8 Diptera) – belongs to <i>Glyptotendipes (Heynotendipes)</i>, to which <i>T. chelonia</i> has been transferred already (see the Ecology and distribution section commented on here).</p>
2018-10-28	p. 411	<p>Gillotia Kieffer, "Antenna" paragraph: See the comment on pp. 402-403, 405 and 411 above.</p>

When was this entry changed?	Where does this entry apply?	What should be changed or noted there?
2018-10-28	p. 411	Gillotia Kieffer, " <i>Ecology and distribution</i> " section, second paragraph, second sentence should read: <i>Gillotia frigida</i> Bhattacharya, Dutta & Chaudhuri, 1985 has been described from India.
2014-05-23	p. 412	<i>Comments</i> , first paragraph: The suggestion that the pecten epipharyngis has "10 or more sharp teeth" in all <i>Glyptotendipes</i> species is contradicted by the diagnosis on the preceding page, where "few ... blunt teeth" are reported for <i>G. (Heynotendipes)</i> ; see also Fig. 10.26E. The statement of a "wide triangulum occipitale" does not achieve the intended differentially diagnostic power either, as there is no illustration, definition of 'wide', nor reference to any taxon showing a different state of this character.
2015-07-18	p. 412	<i>Comments</i> , last paragraph: the species name " <i>G. varipes</i> Goetghebuer" should be replaced with the senior synonym, <i>G. signatus</i> (Kieffer), and the name in the fourth line should read <i>G. chelonia</i> (Townes). An additional species (or synonymous name) to be listed here is <i>Einfeldia nojiriprima</i> Sasa; see the comment on p. 407 above.
2014-03-03	p. 416	Under "Hyporhygma Reiss", the first reference should read Reiss, 1982:289.
2016-03-04	p. 416	" <i>Comments</i> ", second paragraph, line 2: Replace "indented" with recessed, and "tooth" with teeth.  In the same paragraph, the third sentence should begin: The larvae are separable from the similar larvae of some <i>Endochironomus</i> species by ...
2015-04-17	p. 416	" <i>Comments</i> ", last paragraph, change "Chironominae" to Chironomini.
2015-07-18	p. 417	"Kiefferulus Goetghebuer", <i>Comments</i> : "Chironomus" in line 3 from the top and "K." in line 4 from the bottom should be set in italics.
2015-04-17	p. 418	Left column, paragraph on the " <i>Body</i> " in <i>Kloosia</i> : 2nd sentence should begin: Anal setae seemingly arising directly from posterior margin of penultimate segment; procercus indistinct, relatively short, extending .... In 3rd sentence, insert a comma behind "slender".
2015-04-17	p. 418	"Kribiodorum Keiffer" should read ... Kieffer

When was this entry changed?	Where does this entry apply?	What should be changed or noted there?
2014-03-03	p. 418	Under "Kribiodorum Kieffer", the second reference should read Reiss, 1982:294.
2019-07-13	p. 419	Lauterborniella, <i>Ecology and distribution</i> paragraph: "Brasilian" should read Brazilian, and "Brasil" should read Brazil.
2015-11-03	p. 422	<i>Comments</i> under <b>Microtendipes</b> , line 2: correct "antenna" to antennae
2015-04-17	p. 424	<i>Olecryptotendipes</i> , "Labro-epipharyngeal region", last sentence describes the premandible "with 3 pointed teeth", but fig. 10.43 E shows only 2. "Mandible", line 1, delete the comma behind "tooth"; last line describes the pecten mandibularis as "located in basal half of mandible", but in fig. 10.43 C most of the pecten is in the distal half.
2014-03-03	p. 426	The diagnosis statement "Pecten epipharyngis a wide plate with several transparent teeth" does not apply to all species currently placed in <i>Parachironomus</i> ; e.g., see p. 394, couplet 71, <i>P. alatus</i> .
2014-03-03	p. 426	In the key to species groups in <i>Parachironomus</i> , the name " 'arcuatus' group" should read 'gracilior' group, as <i>P. gracilior</i> (Kieffer, 1918) now is the valid name for the doubly invalid <i>Chironomus arcuatus</i> Goetghebuer, 1919.
2019-07-13	p. 427	Left column, above <i>Diagnosis</i> paragraph: "1923:304" should read 1922:130, 131. The genus name <i>Paracladopelma</i> is available from Harnisch's paper in Arch. Hydrobiol. 14(1).
2018-10-28	p. 427	Left column, line 2 from bottom: "coarsely" should read coarse.
2014-03-03	p. 427	In the key and everywhere in the text, " <i>nigritula</i> " should read <i>nigritulum</i>
2018-10-28	p. 427	<i>Paracladopelma</i> Harnisch, " <i>Comments</i> " paragraph: The second sentence should be deleted. As explained on p. 175 in Moller Pillot (2009, Chironomidae larvae of the Netherlands and adjacent lowlands. II. Biology and ecology of the Chironomini), the naming of species groups in Moller Pillot (1978-1979) was due to misidentifications.
2014-03-03	p. 428	Under "Paratendipes Kieffer", the first reference should read Kieffer, 1911:41.

When was this entry changed?	Where does this entry apply?	What should be changed or noted there?
2017-06-08	p. 429	<p>Left column, <i>Comments</i> need to be corrected as follows.  1st sentence: <i>Paratendipes</i> belongs to a group ... .  2nd sentence: The larvae are distinguished by S I setae ... .  3rd sentence: Larvae of the closely related <i>Omisus</i> are ... .</p> <p>Right column, line 2 from bottom should begin:  and by the 3 plates ...</p>
2022-09-14	p. 430	<p>Right column, "<i>Labro-epipharyngeal region</i>" paragraph: the names "<i>P. nubeculosum</i>" (line 3) and "<i>P. braseniae</i>" (lines 9-10) should be set in <i>italics</i>, and the paragraph should end with a full stop [... with brush.]</p>
2016-03-04	p. 430	<p>Right column, "<i>Mentum</i>" paragraph, lines 8–9, parenthesis should read:  (including <i>P. braseniae</i> (Leathers), <i>P. ontario</i> (Walley), and several respectively similar species found in and outside of the Holarctic region).</p>
2016-03-04	p. 431	<p>Left column, lines 10–11 should read:  tum. Most different from the usual antenna shape is <i>P. nubifer</i> with alternate Lauterborn organs on a more divided antenna ...</p> <p>In the same paragraph, line 14 should end:  ... significance as the</p>
2016-03-04	p. 431–432	<p>Page 431, left column, line 16 begins with "Here the proposal of Sæther et al. (2010) is followed". In light of facts and discussion presented in several recent works (e.g., Cranston et al. 2016 in <i>Zootaxa</i> 4079(4) and publications referred to there), <b>readers are cautioned NOT to follow</b> the partially formally invalid and/or factually unfounded <b>proposals and diagnoses in Sæther et al. (2010) concerning the type species and subgeneric division of <i>Polypedilum</i></b>. Likewise, corresponding remarks in Epler et al. (2013), p. 430-432, have become obsolete or inapplicable, especially those relating to <i>Pentapedilum</i> and <i>Tripedilum</i> sensu Sæther et al. (2010). The subgenera in <i>Polypedilum</i> need to be redefined solidly.</p>

When was this entry changed?	Where does this entry apply?	What should be changed or noted there?
2016-03-04	p. 431	<p>Left column, "<i>Asheum</i>" paragraph, lines 3–4 should read: Pinder &amp; Reiss (1983), synonymised with <i>Polypedilum</i> (Sæther &amp; Sundal 1999), then tentatively resurrected (Oyewo &amp; Sæther 2008) based on ...</p> <p>In the same paragraph, lines 12–13 should read: teeth, exceptionally narrow and laterally strongly curved backwards, and mandible ...</p>
2017-11-15	p. 432	Left column, transition between last two lines above " <i>Ecology and distribution</i> " should read: ... of certainty (except for ...
2017-11-15	p. 433	Right column, line 7 from bottom: <i>demeijerei</i> (Kruseman) and <i>R. pilicauda</i> Sæther, while <i>R.</i>
2015-04-17	p. 434	Saetheria Jackson, " <i>Comments</i> ", last sentence claims "the shape of the anal tergite bands" to be "the only feature available to distinguish male adult <i>Saetheria</i> from" <i>Paracladopelma</i> [erroneously spelled " <i>Paracladopelema</i> "]. However, the feature that is both, necessary and sufficient to distinguish all males in <i>Saetheria</i> (overlooked by Jackson 1977) is a hyaline and completely bare lamella that arises from the wider and trichiose dorsal surface of the superior volsella, and varies among species from short scale-like (thus best detectable in lateral view) to ending in a distinct digitiform projection; see, e.g., Zorina (2006 in <i>Opredelitel' Nasekomykh Dal'nego Vostoka Rossii</i> , vol. 6, part 4), p. 426 and fig. 292: 11-14.
2014-03-03	p. 434	Under " <i>Sergentia</i> Kieffer", the first reference should read Kieffer, 1922:288.
2017-06-08	p. 435	Left column, " <i>Comments</i> .", third paragraph: The second sentence should be deleted, as Vallenduuk (2017 in <i>Lauterbornia</i> 82) has transferred the " <i>Sergentia</i> " larva in Cuppen et al. (2009) to <i>Phaenopsectra</i> .
2015-11-03	p. 436	<i>Stictochironomus</i> Kieffer, synonym list, line 2: The misidentification "(= <i>S. caffrarius</i> Kieffer)" should be deleted. Chironomini genus B of Pinder & Reiss (1983) was diagnosed from North American material that may be congeneric with the Afrotropical <i>S. caffrarius</i> but is not conspecific with the latter.
2016-03-04	p. 436	Left column, first paragraph under " <i>Diagnosis</i> " should begin: Medium-sized to large red larvae, from about 6 mm (e.g., North American <i>S. caffrarius</i> group) to 14 mm long. ...

When was this entry changed?	Where does this entry apply?	What should be changed or noted there?
2015-11-03	p. 436	Right column, <i>Comments</i> , line 3 should end: dorsal tooth of mandible (where present) At the end of the first paragraph the term "..., central pair much more slender and lower than outer pair" needs to be deleted; see the <i>Mentum</i> diagnosis and Fig. 10.61C. Second paragraph, first sentence: This statement is not convincing, as those larvae differ in other features as well.
2015-11-03	p. 436	Right column, <i>Ecology and distribution</i> : The second paragraph is lacking a statement on species in the Australasian region assigned to <i>Stictochironomus</i> so far.
2014-03-03	p. 437	Synendotendipes Grodhaus: Synonym list, line 1 should end Grodhaus, 1987a:198. <i>Diagnosis, Dorsal surface of head</i> , line 2 should begin: equal width ...
2016-03-04	p. 438	Left column, line 6 from bottom: Replace "frontoclypeus," with frontoclypeus),
2016-03-04	p. 438	Right column, third paragraph, last line: Replace "identities" with genus relations
2016-03-04	p. 438	Right column, fourth paragraph, line 5 should read: have a ventromentum that includes only 2 median teeth of the  In the same paragraph, lines 8–11 should read: feature a ventromentum that includes all 4 median teeth of the mentum. The division between ventro- and dorsomentum is not always easily discernible; thus, <i>Tribelos</i> is keyed in two places in the key above.
2016-03-04	p. 438	Right column, last paragraph, second sentence should read: Two Palaearctic species ( <i>T. donatoris</i> (Shilova), <i>T. intextum</i> (Walker)) and six Nearctic species (but see the <i>Comments</i> section above) are referred to <i>Tribelos</i> .
2017-06-08	p. 438	Right column, last sentence: Recent guides to Brazilian larvae (e.g., Trivinho-Strixino 2014 in "Insetos aquáticos na Amazônia ...") no longer report any <i>Tribelos</i> .
2018-10-28	p. 439	<i>Xenochironomus</i> Kieffer, " <i>Ecology and distribution</i> ", line 3 from bottom: Replace "Brasil" with Brazil.
2016-03-04	p. 439	<i>Xestochironomus</i> Sublette & Wirth, <i>Diagnosis</i> : Second paragraph should begin: <i>Dorsal surface of head</i> .

When was this entry changed?	Where does this entry apply?	What should be changed or noted there?
2016-03-04	p. 441	Left column, first line should begin: and distally pointed; 6 pairs of ...
2022-09-14	p. 441	Left column, "Comments" on <i>Zavreliella</i> , line 3: "segment 1" should read segment 11
2014-03-03	p. 441	Under "Harnischia complex genus A Epler", the second reference line should end: Epler 2001:8.174.
2014-03-03	p. 442	Under "Harnischia complex genus B Epler", the second reference line should end: Epler 2001:8.175.
2014-03-03	p. 442	Under "Harnischia complex genus C Epler", the second reference line should end: Epler 2001:8.176.
2014-03-03	p. 444	In the right column, delete the "III" at the end of the "Ecology and distribution" heading.
2020-08-28	p. 445	Left column, line 6 from bottom: correct "Pinder et al." to Pinder & Reiss
2020-08-28	p. 447	Right column, "Comments.", line 5 should read: ... sequences leave <i>Micropsectra</i> ...
2017-06-08	p. 448	Right column, "Comments.", second paragraph: in line 3, "larva" should read larvae in line 4, "with a exterior" should read with an exterior
2014-03-03	p. 448	Under "Neozavrelia Goetghebuer", the reference should end: 1941:106.
2014-03-03	p. 449	In the paragraph on the "Mentum" in <i>Neozavrelia</i> , in the third line, "wek" should read weak
2014-01-27	p. 450	In the second paragraph on "Ecology and distribution" of <i>Paratanytarsus</i> , the reference to "Sæther and Spies 2004" should read 2012
2015-02-18	p. 453	Comments, first line should read: <i>Stempellinella</i> larvae can be separated from those of all
2014-03-03	p. 454	Under "Tanytarsus v. d. Wulp", the first reference should end: 1874:lxx.
2020-08-28	p. 455	Left column, first paragraph: line 3 should read: ... material seem to fit ... line 7 should read: ... produced. Palaeolimnologists ...
2014-03-03	p. 455	Under "Thienemanniola Kieffer", the first reference should read Kieffer, 1921c:87

When was this entry changed?	Where does this entry apply?	What should be changed or noted there?
2014-03-03	p. 456	Under "Virgatanytarsus Pinder", the reference line should end: Pinder, 1982:31
2014-03-03	p. 457	In the "Yuasaiella Tokunaga" heading, the second word should not be in boldface.
2015-02-18	p. 457	<i>Comments</i> , second sentence should read: <i>Zavrelia</i> is very close to <i>Stempellinella</i> , but larvae can be distinguished reliably by ... and by ...
2014-03-03	p. 457	If the provisional name "Tanytarsini genus A Ekrem" has been published before, a corresponding reference should be given.
2014-03-03	p. 457	Under "Tanytarsini genus A Ekrem", the second reference should read Pinder & Reiss, 1983.
2020-08-28	p. 458	Right column, first paragraph, line 3: correct "Pinder et al." to Pinder & Reiss
2014-03-03	p. 459	References, second entry: first author's name should read Amakye
2014-03-03	p. 461	The existing 'Grodhaus 1987' reference should read 1987a
2014-03-03	p. 461	<p>The following reference titles should be added:</p> <p>Grodhaus, G. 1976. Two species of <i>Phaenopsectra</i> with drought-resistant larvae (Diptera: Chironomidae). – Journal of the Kansas Entomological Society 49:405-418.</p> <p>Grodhaus, G. 1987b. <i>Phaenopsectra mortensoni</i> n. sp. and its relationships to other Chironomidae (Diptera) of temporary pools. -- Entomologica scandinavica Supplement 29:137-145.</p> <p>Kieffer, J. J. 1911. Nouvelles descriptions des Chironomides obtenus d'éclosion. – Bulletin de la Société d'Histoire naturelle de Metz 27:1-60.</p> <p>Kieffer, J. J. 1921c. Chironomides nouveaux ou peu connus de la région paléarctique. – Bulletin de la Société d'Histoire naturelle de la Moselle 29:51-109.</p>
2014-03-03	p. 461	Concerning the references to works by Kieffer, see the General note on page 1 of this file. For example, the respective sequencing (a, b, c) of titles is incorrect for the years 1913 and 1921.
2015-02-18	p. 461	In the 'Kieffer, J. J. 1913c' reference, "Zuckmucke" and "Strandtumpel" should read Zuckmücke and Strandtümpel, and the journal title should read Biologisches Zentralblatt.

When was this entry changed?	Where does this entry apply?	What should be changed or noted there?
2014-03-03	p. 461	In the 'Kieffer, J. J. 1919' reference, authorship should read Kieffer, J. J. & Thienemann, A. 1919, and in the third line "A. Kock" should read A. Koch
2015-02-18	p. 461	In the 'Kieffer, J. J. 1922' reference, the first word of the title should read Diagnose
2019-07-13	p. 462	In the entry on "Moller Pillot, H. K. M. 1978", the date should read 1978-1979, and the end should read: ... Mededelingen 1: 101 pp. In the immediately following entry, no part of the authorship term should be set in italics.
2019-07-13	p. 462	The following reference titles should be added: Lehmann, J. 1973. Systematische und phylogenetische Studie über die Gattungen <i>Thienemanniola</i> Kieffer und <i>Corynocera</i> Zetterstedt (Diptera, Chironomidae). -- Hydrobiologia 43:381-414. Oliver, D. R., McClymont, D., & Roussel, M. E. 1978. A key to some larvae of Chironomidae (Diptera) from the Mackenzie and Porcupine River watersheds. -- Canadian Fisheries and Marine Service Technical Report 791; 73 p. Pinder, L. C. V. 1982. <i>Virgatanytarsus</i> new genus - for the "triangularis" group of the genus <i>Tanytarsus</i> van der Wulp (Diptera: Chironomidae). -- Spixiana 5:31-34. Ree, H. I. 1992. A new genus and a new species of Chironomidae from Korea. -- Eisei Dobutsu [= Japanese Journal of Sanitary Zoology] 43:19-22.
2019-07-13	p. 463	The following reference titles should be added: Ryser, H. M., Wülker, W., & Scholl, A. 1985. Revision der Gattung <i>Chironomus</i> Meigen (Diptera). X. <i>Lobochironomus</i> n. subg. ( <i>C. montuosus</i> n. sp., <i>C. storai</i> Goetgh., <i>C. mendax</i> Storå). -- Revue Suisse de Zoologie 92:385-404. Sæther, O. A. 2010. <i>Cryptotendipes</i> Lenz from Manitoba, Canada, with keys to known immatures of the genus (Diptera: Chironomidae). -- Zootaxa 2412:1-20.
2015-02-18	p. 463	In the 'Sæther, O. A. 2011' reference, the page range should read 39–52.
2015-02-18	p. 463	The last four reference titles with first author Sæther should be moved to their respective proper places.
2014-03-03	p. 463	The title 'Sæther & Spies 2004' should be replaced with Sæther, O. A. & Spies, M. 2012. Fauna Europaea: Chironomidae <i>In</i> : Beuk, P. & Pape, T. (eds). Fauna Europaea: Diptera Nematocera. Fauna Europaea version 2.5.

When was this entry changed?	Where does this entry apply?	What should be changed or noted there?
2014-03-03	p. 464	In 'da Silva et al. 2010', the third author's name should read Oliveira
2014-03-03	p. 464	In 'Sublette, J. E. 1983', authorship should read Sublette, J. E. & Sublette, M. S.
2017-06-08	p. 464	Right column, titles by first author Trivinho-Strixino: in the first line, second author should read: Strixino, G. Moreover, the four reference titles have been printed out of alphabetical order.
2017-06-08	p. 464	The following reference titles should be added: Sublette, J. E. & Wirth, W. W. 1972. New genera and species of West Indian Chironomidae (Diptera). -- Florida Entomologist 55:1-17. Säwedal, L. 1982. Taxonomy, morphology, phylogenetic relationships and distribution of <i>Micropsectra</i> Kieffer, 1909 (Diptera: Chironomidae). -- Entomologica scandinavica 13:371-400. Tokunaga, M. 1938. Chironomidae from Japan (Diptera). X. New or little-known midges, with descriptions of the metamorphoses of several species. -- Philippine Journal of Science 65:313-383. Wulp, F. M. van der. 1873. [... over het geslacht <i>Chironomus</i> Meig.]. Tijdschrift voor Entomologie 16:LXIX-LXXI. Wulp, F.M. van der. 1875. Dipterologische aantekeningen. Tijdschrift voor Entomologie 17:109-148.
2016-03-04	p. 467	Figure caption, lower line: Delete the blank space between "(Townes)" and the full stop.
2016-03-04	p. 469	Figure caption, lower line should end: ... — A, B, D— <b>F</b> . <i>B. truncatus</i> Reiss and Sublette; C, <b>G</b> . <i>B. reissi</i> Jacobsen.
2015-07-18	p. 473	The caption contains several erroneous data, as well as inconsistencies with the authors' own <i>Comments</i> on "Chironomus Meigen" in their broad sense; see also the present remarks on p. 401 above. Line 2 should read: H. Premandible. – A, F. C. ( <i>Fleuria lacustris</i> (Kieffer); B, E. C. ( <i>Benthalia dissidens</i> Walker; C, G. C. Line 3 should read: ( <i>Baeotendipes</i> ) <i>noctivagus</i> (Kieffer); D, H. C. ( <i>Chironomus</i> ) sp. "Florida" (Epler 2001).
2014-03-03	p. 474	In the figure caption, " <i>lateralis</i> (Goetghebuer)" should read <i>goetghebueri</i> Spies & Sæther
2015-02-18	p. 476, 477	At the start of the figure captions, the names <i>Cryptotendipes</i> and <i>Cyphomella</i> should be set in italics.

When was this entry changed?	Where does this entry apply?	What should be changed or noted there?
2017-11-15	p. 487	The entire caption needs to be replaced as follows: Fig. 10.22. <i>Fissimentum</i> Cranston & Nolte. — A. Mentum. — B. Head capsule, lateral view. — C. Mandible. — D. Labrum-epipharynx. — E. Anterodorsal head sclerites. — F. Antenna. — A, C-F. <i>Fissimentum</i> sp. (Texas) (from Pinder & Reiss 1983). B. <i>Fissimentum</i> sp. 2 (Brazil) (after Cranston & Nolte 1996).
2015-07-18	p. 490	Near the end of the caption, a ? should be inserted in front of " <i>severini</i> "; see Pinder & Reiss 1983: fig. 10.29). Note also that the current valid name for the species in question is <i>Glyptotendipes (Caulochironomus) imbecilis</i> (Walker).
2014-03-03	p. 491	In the figure caption, " <i>varipes</i> Goetghebuer" should read <i>signatus</i> (Kieffer)
2014-05-23	p. 493	In the figure caption, the genus name should read <i>Goeldichironomus</i> , and a blank space should be inserted after "A–E."
2016-03-04	p. 501	Figure caption, upper line: Replace "Kieffer" with Kieffer.
2015-02-18	p. 506	Subfigure E shows 19 teeth on the pecten epipharyngis. Thus, following Moller Pillot (1984), the caption's identification of the specimen as <i>Microtendipes "pedellus</i> (de Geer)" should be corrected to <i>M. chloris</i> aggregate.
2015-04-17	p. 508	See the comments on page 424 made above.
2014-04-24	p. 517	In the figure caption, the subgenus name " <i>Probolus</i> " must be corrected to <i>Probolum</i> in two places.
2019-07-13	p. 519	Caption lines 2 to 3 should read: — D–F. Antenna. — A, D. <i>P. (Polypedilum) nubifer</i> (Skuse). B, E. <i>P. (Uresipedilum) convictum</i> . C, F. <i>P. (Tripodura) ? scalaenum</i> .
2015-04-17	p. 508	Unfortunately, all structures illustrated are those in <i>Saetheria</i> sp. 1 (Jackson 1977). This taxon is known as larvae only, which differ from those of 'typical' members of the genus that are known also as pupae and adults. As the differences cast doubt on whether "sp. 1" belongs to <i>Saetheria</i> , larval morphology in this genus should have been illustrated from a confirmed member species instead.

When was this entry changed?	Where does this entry apply?	What should be changed or noted there?
2015-11-03	p. 526	Figure caption, item C should read: <i>C. S. cafferarius</i> group. <b>Note</b> that all subfigures in Fig. 10.61 were reproduced from Pinder & Reiss (1983). Based on the corresponding original drawings (at ZSM), the respective origins of the illustrated specimens were as follows. A: ITALY, Lago Maggiore (leg. F. Lenz); B: TURKEY (leg. Y. Şahin); C: USA, Kentucky (ex coll. S. S. Roback)
2015-11-03	p. 527	The figure caption should read: Fig. 10.62. <i>Stictochironomus</i> Kieffer II. A, B. Mandible. — C, D. Antenna. — E. Labrum and epipharynx. — F. Dorsal head sclerites. — A, C. <i>Stictochironomus</i> sp(p), B, D–F. <i>S. cafferarius</i> group sp. <b>Note</b> that all subfigures in Fig. 10.62 were reproduced from Pinder & Reiss (1983). Based on the corresponding original drawings (at ZSM), the respective origins of the illustrated specimens were as follows. A: ITALY, Lago Maggiore (leg. F. Lenz); B, D–F: USA, Kentucky (ex coll. S. S. Roback); C: ESTONIA, lake Peipisjärvi (leg. Õ. Tõlp).
2016-03-04	p. 529	Figure caption, lower line should end: ... <i>T. intextum</i> (Walker).
2014-03-03	p. 543	See the correction to Fig. 10.83 on p. 548.
2014-03-03	p. 548	Five of the six subfigures in Fig. 10.83 need to be replaced as they do not illustrate species in <i>Stempellina</i> : A, C, E, F. <i>Neostempellina thienemanni</i> Reiss; D. <i>Neostempellina reissi</i> Caldwell. For references, see the chapter authors' own <i>Comments</i> sections on p. 448 and 452.

INDEX		
2019-07-13	p. 557	Line 3: " <i>italic</i> " should read <i>italics</i>
2015-11-03	p. 557	In the entry on " <i>Ablabesmyia</i> Johannsen", the page numbers should read 61, 62, 71, 112 <i>Alotanypus</i> , numbers should read 43, 45, 46, 54, 92, 94 <i>Amnihayesomyia</i> , last number should read 129 <i>Anatopynyia</i> , numbers should read 40, 44, 96 "Anatypyniini" should read Anatopyniini <i>Apsectrotanypus</i> , numbers: 45, 46, 47, 54, 92, 96

When was this entry changed?	Where does this entry apply?	What should be changed or noted there?
2017-06-08	p. 558	<p><i>Arctopelopia</i>, numbers should read 79, <b>80</b>, 84, 86, 130  The following new entry should be added:  <i>Baeotendipes</i> Kieffer ..... 400, 401  <i>Bethbilbeckia</i>, numbers should read 53, 54  <i>Bilyjomyia</i>, last number should read 97  <i>Biwatendipes</i>, numbers should read 387, 389, 456</p>
2015-11-03	p. 559	<p><i>Brundiniella</i>, numbers should read 46, <b>47</b>, 54, 58, 92, 98  The following new entry should be added:  <i>Calotanypus</i> Roback (<i>Procladius</i>) ..... 51  <i>Cantopelopia</i>, last number should read 69  <i>Clinotanypus</i>, numbers should read 40, <b>48</b>, 50, 92, 99  <i>Coelotanypus</i>, numbers should read 40, 48, <b>49</b>, 92, 100  <i>Coffmania</i>, numbers should read <b>80</b>, 82, 82, 131  <i>Conchapelopia</i>, numbers: 79, <b>81</b>, 83, 84, 93, 132</p>
2015-11-03	p. 560	<p><i>Denopelopia</i>, numbers should read <b>62</b>, 66, 113  <i>Derotanypus</i>, numbers should read <b>50</b>, 57, 101  <i>Djalmabatista</i>, numbers should read 40, <b>51</b>, 56, 102</p>
2019-07-13	p. 561	<p><i>Fittkauimyia</i>, numbers should read 40, <b>52</b>, 103  Between the "<i>flavus</i>" and "<i>flexuella</i>" entries, insert:  <i>Fleuria</i> Kieffer ..... 400, 407, 473  Bottom line: "(Chironominae)" should read  (Chironomini)</p>
2015-11-03	p. 562	<p>First line, change "(Chironominae)" to (Chironomini).  <i>Guassutanypus</i>, numbers should read 43, 44  <i>Guttipelopia</i>, numbers should read 39, <b>63</b>, 93, 114  <i>Hayesomyia</i>, numbers should read 79, 84, 86, 87  In the entry on "<i>heliomesonyctios</i>", change nomenclatural authorship to Langton, and page numbers to 446, 454.  <i>Helopelopia</i>, numbers should read 81, 82, 83  <i>Holotanypus</i>, numbers should read 56, 57, 59  <i>Hudsonimyia</i>, last number should read 115  The following new entry should be added:  <i>imbecilis</i> (Walker) (<i>Glyptotendipes</i> (<i>Caulochir.</i>)) ..... 51</p>
2015-11-03	p. 563	<p><i>Krenopelopia</i>, numbers should read <b>62</b>, 73, 116  <i>Labrundinia</i>, last number should read 117  <i>Larsia</i>, numbers should read 65, <b>67</b>, 93, 118</p>
2015-11-03	p. 564	<p><i>Lobomyia</i>, numbers should read <b>83</b>, 84, 133  In the entry on "<i>longimana</i> Staeger (<i>Trissopelopia</i>)", the epithet should read <i>longiman</i><b>is</b>.  <i>Macropelopia</i>, numbers: 21, 45, 46, 48, <b>53</b>, 92, 104  Macropelopiini, numbers should read 46, 55  <i>Meropelopia</i>, numbers should read 79, <b>84</b>, 86, 134</p>

When was this entry changed?	Where does this entry apply?	What should be changed or noted there?
2015-11-03	p. 565	<p><i>Monopelopia</i>, numbers should read 66, <b>68</b>, 77, 93, 119  <i>Natarsia</i>, numbers should read 21, <b>54</b>, 68, 92, 105  In the entry on "<i>nigritula</i> group", this name should read <i>nigritul<b>um</b></i> group.  In "<i>noctivaga</i> (Kieffer)" the epithet should be <i>noctivag<b>us</b></i>.</p>
2015-11-03	p. 566	<p><i>Paramerina</i>, numbers should read 61, 67, <b>70</b>, 78, 93, 121</p>
2015-11-03	p. 567	<p><i>Pentaneura</i>, numbers: 65, 70, <b>72</b>, 73, 76, 93, 122  <i>Pentaneurella</i>, numbers should read 66, 73, 123  <i>Procladius</i> Skuse, numbers should read 52, <b>55</b>, 59, 106  <i>Psectrotanypus</i>, numbers should read 51, <b>57</b>, 92, 106  A new entry "Pseudochironomini" ..... 391 should be added, as couplets 34 and 35 of the Chironominae key are the only place in the manual where readers can see quickly which of the genera treated in the chapter correspond to "Pseudochironomini".</p>
2015-11-03	p. 568	<p><i>Radotanypus</i>, numbers should read 47, <b>58</b>, 108  <i>Rheopelopia</i>, numbers: 79, 82, 83, 84, <b>85</b>, 87, 135  <i>Saetheromyia</i>, last number should read 109</p>
2020-08-28	p. 570	<p><i>Tanypus</i>, numbers should read 40, 53, <b>59</b>, 92, 110, 111  <i>Telmatopelopia</i>, last number should read 124  <i>Telopelopia</i>, numbers: 68, 69, <b>74</b>, 77, 84, 86, 125  <i>Thienemannia</i>, numbers: <b>198, 264, 373</b>  <i>Thienemannimyia</i> Fittkau, numbers: 79, 84, <b>86</b>, 93, 136  <i>Tripedilum</i> Kieffer was treated sensu Sæther et al. (2010)  !</p>
2020-08-28	p. 571	<p><i>Trissopelopia</i>, numbers should read 65, 72, 73, <b>75</b>, 126  <i>Xenopelopia</i>, numbers should read 69, 74, <b>76</b>, 127  The entry on <i>Yaequintus</i> should read:  <i>Yaequintus</i> Sasa &amp; Suzuki (<i>Denopelopia</i>) ..... 62, 63  <i>Yuasaiella</i>, number should read <b>457</b>  <i>Zavreliomyia</i>, numbers should read 65, 67, 68, 71, <b>77</b>, 128</p>