

Additions and corrections to the second 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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Latest change in respective row	Position (page) in the manual	Correction and/or comment
2014-01-27	General note	The index in the original edition (1983; Ent. scand. Suppl. 19) includes page numbers for occurrences of taxon names in the keys, and that feature has been very helpful. The new manual's index is lacking all (or at least many) such key page numbers.
2014-01-27	General note	Each suggested change to a taxon name in the manual's texts implies a corresponding change in the index; <u>these</u> index changes are <u>not</u> itemized below.
2014-01-27	p. 40, 50	The tribe name Coelotanypodini is invalid as a junior synonym; the valid name is Clinotanypodini
2014-01-27	p. 41	Couplet 4, line 4, tribe name should read Tanypodini (see, e.g., Spies 2005 in Zootaxa 894)
2014-01-27	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 a non-intuitive tripartite 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';
2013-12-19	p. 43	First reference under " <i>Alotanypus</i> " heading should read Roback, 1971:95
2013-12-19	p. 43	Reference title "Roback 1978" should read 1978a.
2013-12-19	p. 45	Reference title "Roback 1978" should read 1978a.
2013-12-19	p. 47	Reference title "Roback 1978" should read 1978a.
2013-12-19	p. 50	Reference title "Roback 1978" should read 1978a.
2013-12-19	p. 51	Reference title "Roback 1978" should read 1978a.
2013-12-19	p. 53	Reference title "Roback 1978" should read 1978a.

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2013-12-19	p. 57	Reference title "Roback 1978" should read 1978a.
2013-12-19	p. 59	First reference under "Tanypus" heading should read Meigen, 1803:261
2013-12-19	p. 61	Left column, top heading should read Tribe Pentaneurini
2013-12-19	p. 67	Second reference under "Larsia" heading should read Beck & Beck 1966;
2013-12-19	p. 72	Third reference under "Pentaneura" heading should read Roback 1971
2013-12-19	p. 74	End of first reference under "Telopelopia" heading should read 1971:255
2013-12-19	p. 81	First reference under "Conchapelopia" heading should read Fittkau, 1957:317
2014-01-27	p. 85	Left column, first paragraph: Reference to "Spies et al. 2008" should read 2009
2013-12-19	p. 85	The heading " <u>Commnts</u> " should read <i>Comments</i>
2013-12-19	p. 90	Reference title "Roback, S. S. 1978" should read 1978a
2014-01-27	p. 90	Reference title "Spies, M., Andersen ... 2008" should read 2009
2013-12-19	p. 88-90	Additional reference titles: Fittkau, E. J. 1968. Eine neue Tanypodinae-Gattung, <i>Djalmabatista</i> (Chironomidae, Dipt.), aus dem brasilianischen Amazonasgebiet. — <i>Amazoniana</i> 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). — <i>Spixiana Supplement</i> 14:253–259. Roback, S. S. 1970. The Chironomidae. — <i>Transactions of the American Philosophical Society, New Series</i> 60:150-162. Roback, S. S. 1974. The immature stages of the genus <i>Coelotanypus</i> (Chironomidae: Tanypodinae: Coelotanypodini) in North America. — <i>Proceedings of the Academy of Natural Sciences of Philadelphia</i> 126:9–19. Roback, S. S. 1978b. New name for <i>Brundinia</i> Roback nec <i>Brundinia</i> Tottenham. — <i>Entomological News</i> 89:141.

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2013-12-19	p. 129	All subfigures need labels: top left = A, top right = B, bottom left = C, bottom center = D, bottom right = E
2013-12-19	p. 131	Subfigure labels C and D need to be switched
2014-01-27	p. 150	Left column, "Ecology and distribution", second paragraph: In the reference to "(Sæther & Willasen 1987)", the second author's name should read Willassen
2014-01-27	p. 153	Last line: Reference to "(Sæther & Spies 2011)" should read 2012
2014-01-27	p. 159	Reference title 'Sæther & Spies 2011' should read 2012
2013-12-19	p. 189	Abstract, line 10 from bottom, last word should read <i>Corynoneurella</i>
2013-12-19	p. 192	The upper alternative of couplet 21 is lacking the terminal lead "22"
2013-12-19	p. 212	The penultimate sentence under "Body" should read: serrate, sometimes dark brown and may be up to 1/2 length of
2014-01-27	p. 283	Reference title 'Sæther, Ashe & Murray' should be moved to the preceding page, above 'Sæther & Cranston'
2013-12-19	p. 387	Abstract, line 3 from bottom, <i>Carbochironomus</i> : second author's name should read Kirschbaum
2013-12-19	p. 389-395	In the Chironominae key, all page references to genus diagnoses are erroneous (Mauch 2013 in Lauterbornia 76: 126, and E. Mauch, pers. comm. to M. Spies); for example, on p. 389 key couplet 5(4) refers to " <i>Zavreliella</i> (p. 434)", but the <i>Zavreliella</i> diagnosis begins on p. 440. This is one of the errors introduced in the second printing; in the first one, the corresponding references in the key are correct.

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2013-12-19	p. 389, 394, 403-404	The larva of <i>Mongolchironomus</i> is reported as unknown, but strong similarities in morphology of the adults and in characteristics of the collecting localities suggest that <i>Cryptotendipes acalcar</i> Reiss, 1990, the larva of which has been described, is congeneric with <i>Mongolchironomus</i> (or consubgeneric, if the latter is treated as a subgenus in <i>Cryptotendipes</i>), quite possibly even conspecific with one of Sasa's species (described in the adult stage only). The new Chironominae chapter makes no mention of <i>C. acalcar</i> or its description (Reiss, F. 1990b. <i>Cryptotendipes acalcar</i> , spec. nov., ein aberranter Gattungsvertreter aus palaearktischen Salzwässern (Chironomidae, Diptera). – Spixiana 13: 209-215.), and the key and the diagnosis for <i>Cryptotendipes</i> reflect only insufficiently that and how <i>C. acalcar</i> differs considerably from 'regular' <i>Cryptotendipes</i> .
2013-12-19	p. 392	Couplet 42, line 4, figure reference should read 10.27A
2013-12-19	p. 395	A (foot)note should be added to explain that – in contrast to what readers are used to from many other works – the genus diagnoses under the "Tribe Chironomini" heading include those for two genera of the "putative" tribe Pseudochironomini
2013-12-19	p. 396	End of first reference under "Axarus" heading should read 1980:32
2013-12-19	p. 400	Seventh reference under "Chironomus" heading should end with Kieffer, 1924.
2014-01-27	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>llaccophila</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), Chironomidae larvae II. KNNV Publishing, Zeist (NL)
2013-12-19	p. 403	The nomenclatural authors of <i>Cryptotendipes</i> are Beck & Beck (Lenz had created a nomen nudum only); thus, the genus section should begin as follows: <i>Cryptotendipes</i> Beck & Beck Fig. 10.11. <i>Cryptotendipes</i> Beck & Beck, 1969: 294 — not Lenz, 1941a: 34

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2013-12-19	p. 406	First reference under "Einfeldia" heading should read Kieffer 1924:393
2014-01-27	p. 407	Right column: Based on the type material of <i>Einfeldia palaeartica</i> Ashe (repl. name for <i>Chironomus dilatatus</i> Goetghebuer), the species has been transferred to <i>Chironomus (Lobochironomus)</i> ; see, e.g., Sæther, O. A.† & Spies, M. 2013 (April). Fauna Europaea: Chironomidae <i>In</i> : Beuk, P. & Pape, T. (eds). Fauna Europaea: Diptera Nematocera. Fauna Europaea version 2.6.
2014-01-27	p. 412	Under <i>Glyptotendipes</i> , in the "Comments" paragraph on the subgenus <i>Heynotendipes</i> , the name " <i>G. varipes</i> Goetghebuer" should be replaced with the senior synonym, <i>G. signatus</i> (Kieffer)
2013-12-19	p. 416	First reference under "Hyporhygma" heading should read Reiss 1982:289
2013-12-19	p. 418-419	Second reference under "Kribiodorum" heading should read Reiss 1982:294
2013-12-19	p. 426	The diagnosis statement "Pecten epipharyngis a wide plate with several transparent teeth" does not apply to all <i>Parachironomus</i> species; e.g., see p. 394, couplet 71, <i>P. alatus</i>
2014-01-27	p. 426	In the key to species groups in <i>Parachironomus</i> , the name "'arcuatus' group" should read ' <i>gracilior</i> ' group, as <i>P. gracilior</i> (Kieffer, 1918) now is the valid name for the doubly invalid <i>Chironomus arcuatus</i> Goetghebuer, 1919
2014-01-27	p. 427	In the key and everywhere in the text, <i>Paracladopelma "nigritula"</i> should read <i>nigritulum</i>
2013-12-19	p. 428	First reference under "Paratendipes" heading should read Kieffer 1911:41
2013-12-19	p. 432	Left column, first paragraph under "Ecology and distribution": <i>vanderplanki</i> is misspelled
2013-12-19	p. 433	Formatting of left column continues through the right column
2013-12-19	p. 434	End of reference under "Sergentia" heading should read 1922:288
2013-12-19	p. 436	First reference under "Synendotendipes" heading should read Grodhaus 1987a:198

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2013-12-19	p. 441	Harnischia complex genus A Epler "2010" should read 2001
2013-12-19	p. 441	Harnischia complex genus B Epler "2010" should read 2001
2013-12-19	p. 442	Harnischia complex genus C Epler "2010" should read 2001
2013-12-19	p. 444, 460	Giłka is misspelled with a pie symbol in all occurrences except the second one on p.444, in which the name is misspelled "Giska"
2014-01-27	p. 449	In the left column, sixth line from the top: "wek" should read weak
2014-01-27	p. 450	Under <i>Paratanytarsus</i> , "Ecology and distribution", the reference to 'Sæther and Spies 2004' should read 2012
2013-12-19	p. 454	First reference under the " <i>Tanytarsus</i> " heading should end with 1874:LXX
2013-12-19	p. 455	First reference under the "Thienemanniola" heading should read Kieffer, 1921c:87
2013-12-19	p. 456	First reference under the " <i>Virgatanytarsus</i> " heading should read Pinder, 1982:31
2013-12-19	p. 457	If the provisional name " <i>Tanytarsini</i> Genus A Ekrem" has been published before, a corresponding reference should be given
2013-12-19	p. 457	Second reference under " <i>Tanytarsini</i> Genus A" heading should read Pinder & Reiss, 1983
2013-12-19	p. 459–465	In the "References" section, the theoretically alphabetical sequence of entries is disrupted in various ways and in many cases, at least once on almost every page; a general inconsistency is that titles by Sæther are listed with the "æ" treated as equivalent to 'ae', but the "ä" in Säwedal is treated differently; moreover, taxon names in the reference titles are not consistently set in italics.
2013-12-19	p. 459	References, second entry, first author's name should read Amakye
2013-12-19	p. 461	The existing 'Grodhaus 1987' reference should read 1987a

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2013-12-19	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
2013-12-19	p. 463	In "Sæther, O. A. 2011", the page range should read 39–52
2014-01-27	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.
2013-12-19	p. 464	In 'da Silva et al. 2010', the third author's name should read Oliveira
2013-12-19	p. 464	In 'Sublette, J. E. 1983', authorship should read Sublette, J. E. & Sublette, M. S. 1983
2013-12-19	p. 459-465	The following reference titles should be added: Grodhaus, G. 1976. Two species of <i>Phaenopsectra</i> with drought-resistant larvae (Diptera: Chironomidae). – Journal of the Kansas Entomological Society 49:405-418. 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. Kieffer, J. J. 1911. Nouvelles descriptions des Chironomides obtenus d'éclosion. – Bulletin de la Société d'Histoire naturelle de Metz 27:1-60. 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. 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. <i>(continued on following page)</i>

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2013-12-19	p. 459-465	<p>(continued)</p> <p>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.</p> <p>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.</p> <p>Säwedal, L. 1982. Taxonomy, morphology, phylogenetic relationships and distribution of <i>Micropsectra</i> Kieffer, 1909 (Diptera: Chironomidae). -- Entomologica scandinavica 13:371-400.</p> <p>Sublette, J. E. & Wirth, W. W. 1972. New genera and species of West Indian Chironomidae (Diptera). -- Florida Entomologist 55:1-17.</p> <p>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.</p> <p>Wulp, F. M. van der. 1874. [... over het geslacht <i>Chironomus</i> Meig.]. Tijdschrift voor Entomologie 16:LXIX-LXXI.</p> <p>Wulp, F.M. van der. 1875. Dipterologische aanteekeningen. Tijdschrift voor Entomologie, 17, 109-148.</p>
2013-12-19	p. 466	The subfigure at bottom left should be labeled D
2013-12-19	p. 474	The subfigure at top left should be labeled A
2014-01-27	p. 474	In the figure caption, " <i>lateralis</i> (Goetghebuer)" should read <i>goetghebueri</i> Spies & Sæther
2014-01-27	p. 491	In the figure caption, " <i>varipes</i> Goetghebuer" should read <i>signatus</i> (Kieffer)
2013-12-19	p. 501	In the figure caption, " <i>perpulchra</i> " should read <i>perpulchrum</i>
2013-12-19	p. 506	The subfigure at top left should be labeled A
2013-12-19	p. 527	The figure caption should read ... A, B. Mandible. — C, D. Antenna. — E. Labrum and epipharynx. — F. Dorsal head sclerites. ... B, D, F. <i>Stictochironomus</i> sp.
2013-12-19	p. 529	The subfigure at bottom left should be labeled D, and subfigure "G" should be relabeled E

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2013-12-19	p. 562	For the species name <i>heliomesonyctios</i> , the nomenclatural author is Langton, and the page numbers should read 446, 454
2013-12-19	p. 565	For <i>Nimbocera</i> , the listing should read <i>Nimbocera</i> Reiss (<i>Tanytarsus</i>)
2013-12-19	p. 565	For <i>nubifer</i> , the listing should read <i>nubifer</i> Coquillett (<i>Tanypus</i>)
2013-12-19	p. 567	For " <i>punctipennis</i> Meigen (<i>Tanypus</i>)", the first page number should read 60
2013-12-19	p. 567	An index 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"