



Zootaxa 3536: 1–61 (2012)  
www.mapress.com/zootaxa/

Copyright © 2012 · Magnolia Press

ISSN 1175-5326 (print edition)

**ZOOTAXA**

ISSN 1175-5334 (online edition)

# Monograph

urn:lsid:zoobank.org:pub:1396DBB0-D7EE-4597-B6AC-40525D1A0A84

# ZOOTAXA

3536

## ***Corynoneura* Winnertz and *Thienemanniella* Kieffer from the Nearctic Region (Diptera: Chironomidae: Orthoclaadiinae)**

YUE FU<sup>1</sup> & OLE A. SÆTHER<sup>2,3</sup>

<sup>1</sup>Key Laboratory of Biologic Resources Protection and Utilization of Hubei Province, Biological Scientific and Technical College of HuBei University for Nationalities, EnShi City 445000, China. E-mail: fuyue2007915@yahoo.com

<sup>2</sup>The Natural History Collections, University Museum of Bergen, University of Bergen, N-5007 Bergen, Norway.

E-mail: ole.sather@zmb.uib.no

<sup>3</sup>Corresponding author



Magnolia Press  
Auckland, New Zealand

Accepted by W. Gilka: 9 Oct. 2012; published: 2 Nov. 2012

YUE FU & OLE A. SÆTHER

***Corynoneura* Winnertz and *Thienemanniella* Kieffer from the Nearctic Region (Diptera: Chironomidae: Orthocladiinae)**

(*Zootaxa* 3536)

61 pp.; 30 cm.

2 November 2012

ISBN 978-1-77557-040-0 (paperback)

ISBN 978-1-77557-041-7 (Online edition)

FIRST PUBLISHED IN 2012 BY

Magnolia Press

P.O. Box 41-383

Auckland 1346

New Zealand

e-mail: [zootaxa@mapress.com](mailto:zootaxa@mapress.com)

<http://www.mapress.com/zootaxa/>

© 2012 Magnolia Press

All rights reserved.

No part of this publication may be reproduced, stored, transmitted or disseminated, in any form, or by any means, without prior written permission from the publisher, to whom all requests to reproduce copyright material should be directed in writing.

This authorization does not extend to any other kind of copying, by any means, in any form, and for any purpose other than private research use.

ISSN 1175-5326 (Print edition)

ISSN 1175-5334 (Online edition)

## Table of contents

Abstract	3
Introduction	3
Material and methods	4
Review of species	5
<i>Corynoneura</i> Winnertz	5
<i>Corynoneura acuminata</i> sp. n.	5
<i>Corynoneura ascensa</i> sp. n.	8
<i>Corynoneura capitanea</i> sp. n.	12
<i>Corynoneura caudicula</i> sp. n.	12
<i>Corynoneura collaris</i> Makarchenko et Makarchenko	16
<i>Corynoneura disinflata</i> sp. n.	18
<i>Corynoneura doriceni</i> Makarchenko et Makarchenko	22
<i>Corynoneura edwardsi</i> Brundin	27
<i>Corynoneura fittkai</i> Schlee	29
<i>Corynoneura floridaensis</i> sp. n.	29
<i>Corynoneura hortonensis</i> sp. n.	33
<i>Corynoneura lobata</i> Edwards	35
<i>Corynoneura macula</i> sp. n.	38
<i>Corynoneura porrecta</i> sp. n.	41
<i>Corynoneura scutellata</i> Winnertz	44
<i>Corynoneura</i> sp. near <i>lacustris</i> Edwards	45
<i>Corynoneura</i> sp. 6 (Bolton)	46
<i>Corynoneura</i> sp. 10 (Bolton)	48
<i>Corynoneura</i> sp. 12 (Bolton)	50
Key to known Nearctic males of <i>Corynoneura</i> Winnertz	51
Key to known Nearctic females of <i>Corynoneura</i> Winnertz	51
Key to Nearctic pupae of <i>Corynoneura</i> Winnertz (based on preliminary manuscript by P.S. Langton and W.P. Coffman)	52
Key to Nearctic larvae of <i>Corynoneura</i> Winnertz (based on Bolton 2007 and Epler 2001)	53
<i>Thienemanniella</i> Kieffer	54
<i>Thienemanniella lobapodema</i> Hestenes et Sæther, 2000	54
<i>Thienemanniella tiunovae</i> Makarchenko et Makarchenko	55
<i>Thienemanniella xena</i> (Roback)	58
Keys to Nearctic <i>Thienemanniella</i> Kieffer	59
Female genitalia	59
Acknowledgements	59
References	59

## Abstract

Twenty-one Nearctic species of *Corynoneura* Winnertz and *Thienemanniella* Kieffer are reviewed. Nine new species are described and illustrated; *C. acuminata* sp. n., *C. ascensa* sp. n., *C. caudicula* sp. n., *C. disinflata* sp. n., *C. floridaensis* sp. n. and *C. macula* sp. n. as male, female, pupa and larva; *C. hortonensis* sp. n. and *C. porrecta* sp. n. as male and female; and *C. capitanea* sp. n. as pharate male. Eight species, *C. collaris* Makarchenko et Makarchenko *C. doriceni* Makarchenko et Makarchenko, *C. edwardsi* Brundin, *C. lobata* Edwards, *C. scutellata* Winnertz, *Thienemanniella lobapodema* Hestenes et Sæther, *T. tiunovae* Makarchenko et Makarchenko, and *T. xena* (Roback) are reexamined based on Nearctic specimens. Additionally, *C. fittkai* Schlee is mentioned, and four species with males unknown are included. Keys to all stages of the Nearctic *Corynoneura* are presented, and keys to *Thienemanniella* are updated. The lateral lamellae on the coxosternapodeme and the shape of labia of adult females are shown to be excellent distinguishing features for species in *Corynoneura*.

**Key words:** Orthoclaadiinae, *Corynoneura*, *Thienemanniella*, new species, Nearctic

## Introduction

*Corynoneura* Winnertz, *Thienemanniella* Kieffer and a few recently described genera are the only genera in the Chironomidae in which the radial sector is retracted, swollen and apically fused with the costa in a thick clavus which terminates at or before the midpoint of the wing. The larvae of these genera also are distinctive with