



Finnish Pipunculidae (Diptera) studies Part I: Taxonomic notes on *Cephalops* Fallén, 1810, *Pipunculus* Latreille, 1802 and *Tomosvaryella* Aczél, 1939

CHRISTIAN KEHLMAIER

University of Lüneburg, Institute of Ecology and Environmental Chemistry, Scharnhorststrasse 1 (Building 13), 21314 Lüneburg, Germany

Contact address: State Natural History Collections Dresden, Museum of Zoology, Königsbrücker Landstrasse 159, D-01109 Dresden, Germany. E-mail: kehlmaier@web.de; Web site: <http://www.kehlmaier.de>

Table of contents

Abstract	2
Introduction	2
Material and methods	2
Results	3
<i>Cephalops</i> Fallén, 1810	3
<i>Cephalops straminipes</i> (Becker, 1897)	3
<i>Cephalops varipes</i> (Meigen, 1824) comb. nov.	4
<i>Pipunculus</i> Latreille, 1802	4
Species characterizations of European <i>Pipunculus</i>	5
<i>Pipunculus calceatus</i> Roser, 1840	5
<i>Pipunculus campestris</i> Latreille, 1802	6
<i>Pipunculus carlestolrai</i> Kuznetsov, 1993	11
<i>Pipunculus dimi</i> Kuznetsov, 1991	13
<i>Pipunculus elegans</i> Egger, 1860 stat. rev.	13
<i>Pipunculus fonsecai</i> Coe, 1966	14
<i>Pipunculus lenis</i> Kuznetsov, 1991	16
<i>Pipunculus lichtwardti</i> Kozánek, 1981	17
<i>Pipunculus monticola</i> Schummel, 1837 nomen dubium	18
<i>Pipunculus oldenbergi</i> Collin, 1956	18
<i>Pipunculus omissinervis</i> Becker, 1889	20
<i>Pipunculus stackelbergi</i> Kuznetsov, 1991	24
<i>Pipunculus tenuirostris</i> Kozánek, 1981	24
<i>Pipunculus violovitshi</i> Kuznetsov, 1991	26
<i>Pipunculus wolffi</i> Kowarz, 1887 stat. rev.	27
<i>Pipunculus zugmayeriae</i> Kowarz, 1887	29
Identification key to European <i>Pipunculus</i>	30
<i>Tomosvaryella</i> Aczél, 1939	33
<i>Tomosvaryella kalevala</i> Kehlmaier spec. nov.	33
<i>Tomosvaryella minuscula</i> (Collin, 1956)	37
<i>Tomosvaryella rossica</i> Kuznetsov, 1993	38
Addenda to the identification key provided by Földvári & De Meyer (1999)	39
Final remarks	39
Acknowledgements	40
References	40

Abstract

The paper represents the first part of a project dealing with the Finnish Pipunculidae fauna and focuses on certain taxonomic aspects of the genera *Cephalops* Fallén, 1810, *Pipunculus* Latreille, 1802 and *Tomosvaryella* Aczél, 1939. *Tomosvaryella kalevala* Kehlmaier spec. nov. is described as new to science and its male and female terminalia are figured. Lectotypes are designated for *Pipunculus ater* Meigen, 1824, *Pipunculus calceatus* Roser, 1840, *Pipunculus campestris* Latreille, 1802, *Pipunculus chlorionae* Frey, 1945, *Pipunculus dentipes* Meigen, 1838, *Pipunculus elegans* Egger, 1860, *Pipunculus oldenbergi* Collin, 1956, *Pipunculus spinipes* Meigen, 1830, *Pipunculus thomsoni* Becker, 1897, *Pipunculus varipes* Meigen, 1824, *Pipunculus wolfi* Kowarz, 1887 and *Pipunculus zugmayeriae* Kowarz, 1887. *Pipunculus elegans* and *P. wolfi* are resurrected from synonymy (stat. rev.). *Pipunculus varipes* is transferred to *Cephalops* (comb. nov.). The following new synonymies are proposed (syn. nov.): *Cephalops semifumosus* (Kowarz, 1887) = *Cephalops varipes* (Meigen, 1824), *P. spinipes* and *P. thomsoni* = *P. campestris*, *Pipunculus balticus* Kuznetsov, 1991 = *Pipunculus tenuirostris* Kozánek, 1981, *Pipunculus phaeton* Coe, 1966 and *Pipunculus nartshukae* Kuznetsov, 1990 = *P. omissinervis* Becker, 1889, *Tomosvaryella magyarica* Földvári & De Meyer, 1999 = *Tomosvaryella minuscula* (Collin, 1956). The European representatives of *Pipunculus* are characterized, their terminalia partly figured and the taxa keyed out in an dichotomous identification key. *Tomosvaryella rossica* Kuznetsov, 1993 and *Tomosvaryella cilitarsis* (Strobl, 1910) are partly figured and, together with *T. kalevala* Kehlmaier spec. nov., incorporated into the identification key of Földvári & De Meyer (1999).

Key words: Diptera, Pipunculidae, *Cephalops*, *Pipunculus*, *Tomosvaryella*, identification key, Palaearctic, Finland, new species

Introduction

Ever since Fallén's and Zetterstedt's journeys through Fennoscandia in the early 19th century, the Northern European fauna of big-headed flies has been investigated by a fair number of entomologists, dedicating part of their scientific interest in collecting and identifying this inconspicuous but fascinating family of two-winged insects. Being small in size (2–12mm) and rather uniform in outer appearance, species recognition lies hidden in the variability of the genitalic structures, which was mainly revealed and put to use during the past decades starting with the pioneering works of Collin (e.g. Collin 1941, 1956).

For obtaining a better idea of the composition of the Finnish Pipunculidae fauna, a project was initiated by Dr. Gunilla Ståhls to revise the collection material of the Finnish Museum of Natural History. Additionally, several private collections of active Finnish dipterologists were partly studied and the author undertook collecting efforts during various field trips in August 2006. After starting the project, it soon became evident that type specimens of several species of various genera had to be studied in order to interpret their identity and outline their taxonomic limits correctly. As a result, the current paper presents the taxonomic implications resulting from the study of available type material, dealing with aspects on *Cephalops* Fallén, 1810, *Pipunculus* Latreille, 1802 and *Tomosvaryella* Aczél, 1939. The second part of the project will then focus on the actual Finnish species list, providing voucher specimens for as many biogeographical provinces possible (Kehlmaier & Ståhls in prep.).

Material and methods

Numerous institutional collections and private collectors contributed pipunculid material and/or granted access to their collections. In this study, the following collection acronyms are used throughout the text:

Institutional collections

DEI Deutsches Entomologisches Institut, Müncheberg, Germany, F. Menzel.
HNHM Hungarian Natural History Museum, Budapest, L. Papp & M. Földvári.