

# CHIRONOMIDAE TYPES AT THE MUSEUM OF COMPARATIVE ZOOLOGY, BOSTON

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## Abstract

The Chironomidae (Insecta: Diptera) type collection at the Museum of Comparative Zoology (MCZ) is reviewed. It comprises 23 primary types, as well as paratypes and paralectotypes for an additional 29 species, mostly resulting from research by H. Loew and H. K. Townes, respectively. Notes updating the taxonomic status are provided for several species.

## Introduction

The chironomid collection of the Museum of Comparative Zoology (MCZ) at Harvard University in Boston, Massachusetts (USA), includes about 1,200 specimens mostly stored dry on pins, with a small number mounted on slides. It is historically relevant but not well known. The main parts of this material have resulted from respective research endeavors by H. Loew (1807-1879) and H. K. Townes (1913-1990). Its geographic emphasis lies in the United States and Central America.

The annotated checklist presented below (Table 1) was generated during a research visit to the Museum of Comparative Zoology in February 2011 that was partly financed by an Ernst Mayr Travel Grant in Animal Systematics from MCZ/Harvard University.

## Results

The collection includes 52 type specimens now classified as 10 holotypes, 5 lectotypes and 8 syntypes, as well as paratypes and paralectotypes of an additional 29 Chironomidae species (Table 1). The majority of the types belong to the subfamilies Chironominae and Tanypodinae.

All names of species and references were checked with the corresponding literature. The notes on the species' taxonomic status are based on *Systema Dipteroorum* (Thompson & Pape 2010), as well as on published papers, catalogs (Oliver et al. 1990, Spies & Reiss 1996, Ashe & O'Connor 2009) and/or information on the collection labels. Some of the primary types were found labeled merely with "type". The present respective interpretations of such specimens as holotypes, syntypes, etc., are based on all available data, e.g. those in the respective corresponding publications.

The information presented here will be included in the database of primary types of Chironomidae already accessible online as part of the MCZ Entomology database (<http://insects.oeb.harvard.edu/mcz>).

**Table 1.** Chironomidae species with types deposited in the collection of the Museum of Comparative Zoology at Harvard University, Boston. Abbreviations: H = holotype, L = lectotype, P = paratype, PL = paralectotype, S = syntype, M = male, F = female, AU = Australian, NE = Nearctic, NT = Neotropical

CHIRONOMINAE								
Type number	Original genus	Original species	Author/Reference	Type	Sex	Preparation	Distribution	Note
MCZT 07433	<i>Chironomus</i>	<i>brachialis</i>	Coquillett, 1901: 607	S	M, F	Pinned	NE	1
MCZT 19425	<i>Chironomus</i>	<i>bulbosa</i>	Gerry, 1933: 97	S	M, F	Pinned	NT	2
MCZT 15655	<i>Chironomus</i>	<i>imperator</i>	Walley, 1926: 64	P	M, F	Pinned	NE	3

MCZT 19424	<i>Chironomus</i>	<i>jamaicensis</i>	Gerry, 1933: 96	S	M, F	Pinned	NT	4
MCZT 25385	<i>Chironomus</i>	<i>nigricans</i>	Johannsen, 1905: 219	P	M, F	Pinned	NE	5
MCZT 07434	<i>Chironomus</i>	<i>taeniapennis</i>	Coquillett, 1901: 607	S	F	Pinned	NE	6
MCZT 25404	<i>Glyptotendipes</i>	<i>testaceus</i>	Townes, 1945: 140	P	M, F	Pinned	NE	
MCZT 25393	<i>Harnischia</i>	<i>amachaerus</i>	Townes, 1945: 168	P	M	Pinned	NE	7
MCZT 25381	<i>Harnischia</i>	<i>argentea</i>	Townes, 1945: 164	P	M	Pinned	NE	8
MCZT 25389	<i>Harnischia</i>	<i>carinata</i>	Townes, 1945: 158	P	M	Pinned	NE	9
MCZT 25398	<i>Harnischia</i>	<i>cuneata</i>	Townes, 1945: 163	P	M	Pinned	NE	10
MCZT 25401	<i>Harnischia</i>	<i>potamogeti</i>	Townes, 1945: 159	P	M	Pinned	NE	11
MCZT 25387	<i>Omisus</i>	<i>pica</i>	Townes, 1945: 27	P	M	Pinned	NE	
MCZT 25394	<i>Polypedilum</i>	<i>simulans</i>	Townes, 1945: 43	P	M	Pinned	NE	
MCZT 25399	<i>Pseudochironomus</i>	<i>banksi</i>	Townes, 1945: 17	H, P	M	Pinned	NE	
MCZT 25386	<i>Pseudochironomus</i>	<i>crassus</i>	Townes, 1945: 15	H	M	Pinned	NE	
MCZT	<i>Stenochironomus</i>	<i>albipalpus</i>	Borkent, 1984: 66	P	M, F	Slide	NE	
MCZT	<i>Stenochironomus</i>	<i>fuscipatellus</i>	Borkent, 1984: 64	P	M	Slide	NE	
MCZT	<i>Stenochironomus</i>	<i>woodi</i>	Borkent, 1984: 91	P	M, F	Slide	NE	
MCZT 27258	<i>Tanytarsus</i>	<i>subtendens</i>	Townes, 1945: 65	P	M, F	Pinned	NE	12
MCZT 25391	<i>Tribelos</i>	<i>protectus</i>	Townes, 1945: 69	P	M	Pinned	NE	13
MCZT 25403	<i>Tendipes</i>	<i>atroviridis</i>	Townes, 1945: 114	P	M, F	Pinned	NE	14
MCZT 25384	<i>Tendipes</i>	<i>biseta</i>	Townes, 1945: 127	P	M, F	Pinned	NE	15
MCZT 25395	<i>Tendipes</i>	<i>carus</i>	Townes, 1945: 118	P	M	Pinned	NE/NT	16
MCZT 25397	<i>Tendipes</i>	<i>ochreatus</i>	Townes, 1945: 115	P	M	Pinned	NE	17
MCZT 25382	<i>Tendipes</i>	<i>tuberculatus</i>	Townes, 1945: 128	H, P	M, F	Pinned	NE	18

#### ORTHOCLADIINAE

Type number	Original genus	Original species	Author/Reference	Type	Sex	Preparation	Distribution	Note
MCZT 01260	<i>Chasmatonotus</i>	<i>bimaculatus</i>	Osten-Sacken, 1877: 191	S	M	Pinned	NE	
MCZT 10388	<i>Chasmatonotus</i>	<i>unimaculatus</i>	Loew, 1864: 50	S	M, F	Pinned	NE	

**TANYPODINAE**

Type number	Original genus	Original species	Author/Reference	Type	Sex	Preparation	Distribution	Note
MCZT	<i>Ablabesmyia</i>	<i>parajanta</i>	Roback, 1971: 373	P	M	Slide	NE	
MCZT	<i>Ablabesmyia</i>	<i>tarella</i>	Roback, 1971: 368	P	M	Pinned/Slide	NE	19
MCZT 31778	<i>Coelotanypus</i>	<i>cletis</i>	Roback, 1963: 174	H	M	Slide	NT	
MCZT 10367	<i>Tanypus</i>	<i>bellus</i>	Loew, 1866: 4	L, PL	M, F	Pinned/Slide	NE	20
MCZT 19423	<i>Tanypus</i>	<i>brooksi</i>	Gerry, 1933: 95	S	M	Pinned	NT	21
MCZT 07431	<i>Tanypus</i>	<i>concinus</i>	Coquillett, 1895: 308	S	M, F	Pinned	NE/NT	22
MCZT 15660	<i>Tanypus</i>	<i>cornuticaudatus</i>	Walley, 1925: 277	P	M, F	Pinned/Slide	NE	23
MCZT 15657	<i>Tanypus</i>	<i>currani</i>	Walley, 1925: 276	P	F	Pinned	NE	24
MCZT 10368	<i>Tanypus</i>	<i>flavicinctus</i>	Loew, 1861: 309	H	M	Slide	NE	25
MCZT 15658	<i>Tanypus</i>	<i>garretti</i>	Walley, 1925: 275	P	F	Pinned/Slide	NE	26
MCZT 10369	<i>Tanypus</i>	<i>hirtipennis</i>	Loew, 1866: 5	H	M	Slide	NE	27
MCZT 10376	<i>Tanypus</i>	<i>humeralis</i>	Loew, 1866: 3	L, PL	M, F	Pinned/Slide	NE/NT	28
MCZT 15661	<i>Tanypus</i>	<i>mallochi</i>	Walley, 1925: 273	P	M	Pinned	NE	29
MCZT 15662	<i>Tanypus</i>	<i>peleensis</i>	Walley, 1926: 64	P	M, F	Pinned/Slide	NE/NT	30
MCZT 15656	<i>Tanypus</i>	<i>pilicaudatus</i>	Walley, 1925: 277	P	M	Pinned/Slide	NE	31
MCZT 10370	<i>Tanypus</i>	<i>pilosellus</i>	Loew, 1866: 5	L, PL	F	Pinned/Slide	NE/NT	32
MCZT 10371	<i>Tanypus</i>	<i>pinguis</i>	Loew, 1861: 308	H	F	Pinned	NE	33
MCZT 15659	<i>Tanypus</i>	<i>prudens</i>	Walley, 1925: 275	P	M	Slide	NE	34
MCZT 10372	<i>Tanypus</i>	<i>pusillus</i>	Loew, 1866: 5	H	M, F	Pinned	NE	35
MCZT 10373	<i>Tanypus</i>	<i>scapularis</i>	Loew, 1866: 2	L, PL	M, F	Pinned/Slide	NE/NT	36
MCZT 31777	<i>Tanypus</i>	<i>telus</i>	Roback, 1971: 61	H, P	M, F	Pinned/Slide	NE	
MCZT 10374	<i>Tanypus</i>	<i>thoracicus</i>	Loew, 1866: 4	L, PL	M, F	Pinned/Slide	NE	37
MCZT 10375	<i>Tanypus</i>	<i>tricolor</i>	Loew, 1861: 309	H	F	Pinned	NE/NT	38

**TELMATOGETONINAE**

Type number	Original genus	Original species	Author/Reference	Type	Sex	Preparation	Distribution	Note
MCZT 27639	<i>Thalassomyia</i>	<i>setosipennis</i>	Wirth, 1947: 121	P	M, F	Pinned	AU	39

Notes on Table 1

- Chironomus brachialis* Coquillett, 1901 is now *Demeijerea brachialis* (Coquillett, 1901).
- Chironomus bulbosa* Gerry, 1933, the spelling of which has been corrected to *C. bulbosus*, is a nomen dubium in Chironominae.
- Chironomus imperator* Walley, 1926 is a junior synonym of *Chironomus plumosus* (Linnaeus, 1758).
- Chironomus jamaicensis* Gerry, 1933 is a nomen dubium in Chironominae.
- Chironomus nigricans* Johannsen, 1905 is now *Endochironomus nigricans* (Johannsen, 1905).
- Chironomus taeniapennis* Coquillett, 1901 is a junior synonym of *Stenochironomus hilaris* (Walker, 1848).
- Harnischia amachaerus* Townes, 1945 is now *Cladopelma amachaerus* (Townes, 1945).
- Harnischia argentea* Townes, 1945 is now *Cyphomella argentea* (Townes, 1945).
- Harnischia carinata* Townes, 1945 is now *Parachironomus carinatus* (Townes, 1945).
- Harnischia cuneata* Townes, 1945 is now *Demicryptochironomus cuneatus* (Townes, 1945).
- Harnischia potamogeti* Townes, 1945 is now *Parachironomus potamogeti* (Townes, 1945).
- Tanytarsus subtendens* Townes, 1945 is now *Endochironomus subtendens* (Townes, 1945).
- Tanytarsus protectus* Townes, 1945 is now a junior synonym of *Tribelos jucundum* (Walker, 1848).
- Tendipes atroviridis* Townes, 1945 is now *Chironomus atroviridis* (Townes, 1945).
- Tendipes biseta* Townes, 1945 is now *Chironomus biseta* (Townes, 1945).
- Tendipes carus* Townes, 1945 is now *Goeldichironomus carus* (Townes, 1945).
- Tendipes ochreateus* Townes, 1945 is now *Chironomus ochreateus* (Townes, 1945).
- Tendipes tuberculatus* Townes, 1945 is now *Chironomus tuberculatus* (Townes, 1945).
- Ablabesmyia tarella* Roback, 1971 is a junior synonym of *Ablabesmyia mallochi* (Walley, 1925).
- Tanypus bellus* Loew, 1866 is now *Procladius bellus* (Loew, 1866).
- Tanypus brooksi* Gerry, 1933 is nomen dubium in Pentaneurini.
- Tanypus concinnus* Coquillett, 1895 is now *Coelotanypus concinnus* (Coquillett, 1895).
- Tanypus cornuticaudatus* Walley, 1925 is now *Helopelopia cornuticaudata* (Walley, 1925).
- Tanypus currani* Walley, 1925 is now *Conchapelopia currani* (Walley, 1925).
- Tanypus flavicinctus* Loew, 1861 is a junior synonym of *Clinotanypus pinguis* (Loew, 1861).
- Tanypus garretti* Walley, 1925 is a junior synonym of *Psectrotanypus dyari* (Coquillett, 1902).
- Tanypus hirtipennis* Loew, 1866 is a junior synonym of *Macropelopia decedens* (Walker, 1848).
- Tanypus humeralis* Loew, 1866 is now *Coelotanypus humeralis* (Loew, 1866).
- Tanypus mallochi* Walley, 1925 is now *Ablabesmyia mallochi* (Walley, 1925).
- Tanypus peleensis* Walley, 1926 is now *Ablabesmyia peleensis* (Walley, 1926).
- Tanypus pilicaudatus* Walley, 1925 is now *Helopelopia pilicaudata* (Walley, 1925).
- Tanypus pilosellus* Loew, 1866 is now *Labrundinia pilosella* (Loew, 1866).
- Tanypus pinguis* Loew, 1861 is now *Clinotanypus pinguis* (Loew, 1861).
- Tanypus prudens* Walley, 1925 is a junior synonym of *Ablabesmyia pulchripennis* (Lundbeck, 1898).
- Tanypus pusillus* Loew, 1866 is a junior synonym of *Procladius bellus* (Loew, 1866).
- Tanypus scapularis* Loew, 1866 is now *Coelotanypus scapularis* (Loew, 1866).
- Tanypus thoracicus* Loew, 1866 is a junior synonym of *Clinotanypus pinguis* (Loew, 1861).
- Tanypus tricolor* Loew, 1861 is now *Coelotanypus tricolor* (Loew, 1861).
- Thalassomyia setosipennis* Wirth, 1947 is valid with the spelling *Thalassomyia setosipennis*.

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