

# On some old collections of Chloropidae in the Zoological Institute, St.Petersburg (Diptera)

E.P. Nartshuk

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Chloropidae specimens identified by famous dipterists C.F. Fallén, J.W. Meigen, J.W. Zetterstedt and H. Loew, and deposited in the Zoological Institute, St.Petersburg are revised. The specimens identified by Meigen originate from the collection of J. Waltl.

E.P. Nartshuk, Zoological Institute, Russian Academy of Sciences, Universitetskaya nab. 1, St.Petersburg 199034, Russia.

There are some old specimens of Chloropidae in the Diptera collection of the Zoological Institute in St.Petersburg. They originate from collections of famous dipterists or represent specimens identified by them. The type specimens of Chloropidae described by Th. Becker and O. Duda were revised by me earlier (Nartshuk, 1970). Specimens of C.F. Fallén, J.W. Meigen, J.W. Zetterstedt and H. Loew are considered in this paper. The following abbreviations for museums are used: MHNP – Natural History Museum in Paris; NHMW – Natural History Museum in Vienna; ZIN – Zoological Institute, Russian Academy of Sciences, St.Petersburg.

## Carl Friedrich Fallén (1764-1830)

Four specimens originating probably from Fallén's collection are found. Three of them are pinned and have rather long rectangular labels of old light brownish paper with generic and species names, small red tag, and small tag with sex symbol.

The specimen labelled "*Oscinis saltatrix* Fall. Finl." and "♂" is a female of *Meromyza* without head. Abdomen with one black stripe and black spot on hypopleura allow me to identify this specimen as *M. sororcula* Fedoseeva. The letter "f" in words Fall[én] and Finl[and] is written as a small, not capital one.

Another specimen, labelled "*Oscinis lineata* Fall. Suecia" and "♀", is a female of *Chlorops speciosus* Meigen. The specimen is in good condition. Usually *Musca lineata*

Fabricius is considered a synonym of *Chlorops pumilionis* Bjerkander. The type specimens of *Musca lineata* is lost. There is only the name label in the Zoological Museum in Copenhagen (Zimsen, 1964). The specimen in the Winthem's collection in Vienna labelled "Suecia, *O. lineata*" belongs to *Chlorops pumilionis*.

The third specimen is labelled "*Oscinis cereris* Fall. Suecia", "♂" and also has number 4573 written by pencil. It is a female of *Cetema* with dark, not white arista, in good condition, only left antenna missing.

For one more specimen associated with Fallén see below when Meigen's specimens are considered.

## Johann Wilhelm Meigen (1764-1845)

The presence of specimens identified by Meigen in the St.Petersburg collection was never mentioned in the literature, except a recent publication (Kandybina & al., 1987) in which suspected syntypes of 9 of Meigen's species of Limoniidae and Tipulidae were listed and a photograph of the original Meigen label included.

Random inspection of the collection shows that specimens identified by Meigen are present in nearly all families of Diptera (e.g. in Muscidae, Opomyzidae, Platystomatidae, Drosophilidae, Tephritidae, Tachinidae, Syrphidae, and Phoridae). As in Meigen's main collection in MHNP (Pont, 1986), one specimen of each species has a square label of old light pinkish paper with

generic and species names and sex symbol in Meigen's handwriting (Horn & al., 1990: Pl. 36: 4). Where both sexes are present, each specimen has such a label.

In addition to the original labels, Meigen's specimens have one or two printed labels added apparently in the 90's of the foregoing century: "k. Brandt" (in Cyrillic characters, = collection of Brandt) and/or "Meigen det.". When the second label is absent, an inscription "Meigen det." in Indian ink (handwriting not identified) is present either on the first label or on separate blanc label. Academician Johann Friedrich Brandt (1802-1879), in Russian spelling Fedor Fedorovich Brandt, was Director of the Zoological Museum in St.Petersburg since 1831. He made three journeys to Germany and other West European countries where he extensively bought zoological collections for the Museum (Brandt, 1865). His archives currently conserved in the St.Petersburg Branch of the Archives of the Russian Academy of Sciences, St.Petersburg, contain (F. 51, Op. 3, D. 8, P. 47) a statement that in 1838 the collection of the Museum was enriched with 1004 specimens of Diptera representing 800 species, of them 500 species new for the collection. As indicated in the "Journal der beym Zoologischen Museum der Keiserlichen Akademie der Wissenschaften eingehenden zoologischen Gegenstände" (F. 51, Op. 3, D. 51, P. 34), in 1838 a collection of 800 species of Diptera was bought from Dr Waltl in Passau. 175 fr was paid for this collection (F. 51, Op. 3, D. 55, P. 57). It is well known that J. Waltl's Diptera were identified by Meigen, but nothing has been published as yet on the fate of this collection (Pont, 1986). All interesting specimens from Waltl's collection were retained by Meigen (Morge, 1974, p. 151-152). Extracts from Waltl's letter are reproduced on p. 317.

There are 13 specimens of Chloropidae identified by Meigen. They are pinned, except one which is glued. Eleven of these specimens have in addition to Meigen's label on pinkish paper a printed label "c[ollection of] Brandt" (in Russian) with inscription "Meigen det." by hand. These specimens are, Meigen's label first:

1. *Meromyza saltatrix* – it is a female of *Meromyza* with black palpi, in good condition, probably *Meromyza saltatrix* (Linnaeus), for species identification the male genitalia should be examined.

2. *Meromyza variegata* – a male, palpi black in apical part, stripes on thorax red-

dish, right hind leg missing, otherwise in condition good. In recent literature (Fedoseeva, 1960; Nartshuk & al., 1970; Ismay, 1981), this species is given as *Meromyza femorata* Macquart. Such identification is based on the figure of the male genitalia published for the first time by Fedoseeva (1960). She saw type specimens neither of *M. variegata* Meigen, 1830, nor of *M. femorata* Macquart, 1835. Ismay (1981) who examined a male syntype specimen of *M. variegata* in the Meigen's collection in Paris found that it corresponds to *M. femorata* sensu Fedoseeva. Specimens of *M. variegata* identified by Meigen, which I examined in the Winthem's collection in Vienna, also belong to *M. femorata* sensu Fedoseeva. Hence, specimens identified by Meigen as *M. variegata* in all the three investigated collections are conspecific. Neither Meigen, nor Macquart mentioned the colour of palpi, but Meigen described thoracic stripes in *M. variegata* as grey, and Macquart in *M. femorata* as testaceous. Usually the stripes on notum in *M. femorata* sensu Fedoseeva are reddish, but sometimes grey. The fate of type specimens of *M. femorata* Macquart is unknown, possibly they are in the Lille Museum (see Ismay, 1981). I shall try to clarify the identity of *M. variegata* in the near future discussing *Meromyza* species of Middle Europe.

3. *Chlorops hypostigma* – a male, corresponding to the original description, in excellent condition. Syntypes of this species are in MHNP and NHMW.

4. *Chlorops geminata* – a specimen without abdomen, structures of head and thorax correspond to the original description of *C. geminatus* Meigen, 1830. Syntypes are in MHNP.

5. *Chlorops strigula* – a female, antennae missing, otherwise in good condition. The specimen does not belong to *C. strigulus* in the current interpretation. It is *C. fulviceps* von Rosen, 1840 (= *C. brevimanus* Loew, 1866).

6. *Chlorops lineata* – a female, condition good, represents *Thaumatomyia notata* (Meigen, 1830), not *C. lineatus* (Fabricius, 1781), a junior synonym of *C. pumilionis* (Bjerkander, 1778) in the current interpretation.

7, 8. *Chlorops cereris* – 2 specimens, from one only thorax remaining, the second is a male of *Cetema elongata* Meigen, 1830. *C. cereris* (Fallén, 1820) is a separate species.

9. *Chlorops albiseta* – a female, antennae and parts of legs missing, otherwise in good condition. Wings and legs are dark, these

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La plus grande partie de ces espèces sont en  
deux exemplaires, savoir ♂ ♀ Dr Waltl.

Extracts from Waltl's letter to Ménétries dated March 6, 1837: "Cependant sont [sic] une collection de diptères de 960 espèces déterminées systématiquement par le célèbre Diptérologue Mr Meigen est pour votre service à un juste prix de 220 francs. La plus grande partie de ces espèces sont en deux exemplaires, savoir ♂ ♀ . . . Dr Waltl".

characters correspond to the current treatment of *C. albiset* as a junior synonym of *Oscinella maura* (Fallén, 1820). Syntypes are in MHNP (2 specimens, L. Matile, pers. comm.) and in NHMW (4 specimens, examined by me).

10. *Chlorops vindicata* – a female, condition excellent, cheeks are narrower than first flagellomere, legs dark. The specimen corresponds to the original description. Currently *Chlorops vindicatus* Meigen, 1830 is considered a junior synonym of *Oscinella frit* (Linnaeus, 1758).

11. *Chlorops maura* – a female, glued to card, represents *Oscinella frit* L. *O. maura* (Fallén, 1820) is a separate species.

12, 13. Two specimens have a square label of old brownish (not pinkish) paper in Meigen's handwriting, but no label "c. Brandt". Whether these differences are incidental or the specimens belong to another accession, is not clear. Some similarly labelled specimens were seen in other families. One female labelled "*Chlorops nasuta*" is *Chlorops rufescens* Oldenberg (= *meigenii* Loew). Another female labelled "*Oscinis maura* Fall. v.[von?, vidi?] Fall." is *Oscinella* with hyaline wings and dark legs. The antennae are missing and it is not possible to identify the specimen exactly. The labels are written doubtless by Meigen hand, but Meigen used the generic name *Chlorops*, whereas Fallén used *Oscinis*.

In addition to the above Meigen's specimens, there are 19 other Chloropidae speci-

mens and one pin without specimen originating from Brandt's collection. They are labelled "Deutschland" or "Germ.[ania]" and "Bouché det." (printed labels) but usually without scientific names. Probably the names were indicated in bottom labels now missing. These specimens without names are: 3 specimens of *Oscinella frit* L., 1 specimen of *O. nitidissima* Meigen, 1 specimen of *Cetema cereris* Fallén, 3 females of *Meromyza* sp., 1 male of *M. saltatrix* L., 1 specimen of *Chlorops pumilionis* Bjerkander, 3 specimens of *C. speciosus* Meigen, and 2 specimens of *C. rufescens* Oldenberg.

Four specimens labelled "Germ." have a handwritten label with species name (handwriting not identified), but no label "Bouché det.". These species are: "*glabra* Meig." – a female of *Chlorops speciosus* Meigen, "*pratorum* Meig." – a female of *M. pratorum* Meigen, "*frit* L." – a female of *Oscinella frit* L., "*festiva* M." – a male of *Thaumatomyia notata* Meigen. The name *festiva* is not known in Palaearctic Chloropidae; *Phytomyza festiva* Meigen is now considered a synonym of *Napomyza elegans* (Meigen) in Agromyzidae.

#### Johann Wilhelm Zetterstedt (1785-1874)

Specimens of Zetterstedt got to St.Petersburg via H. Loew and R. Osten-Sacken, they are labelled "coll. Osten-Sacken". There are 5 specimens of Zetterstedt in the collections. They have generic and species name and in-

scription "Zttst don", all words in Loew's hand. 3 specimens have also another label with generic and species names, author and letters "Lw" in parenthesis, in Loew's hand too. These species are:

1. "*Madiza oscinina* Zttst don" – a female of *Siphonella oscinina* (Fallén).

2. "*Oscinis nasuta* Zttst don" and "*Chlorops speciosa* M. (Lw)" – a female of *Chlorops speciosus* Meigen.

3, 4. "*Oscinis cereris* Zttst don" and "*Centor cereris* Fall. (Lw)" – a male and female of *Cetema cereris* (Fallén).

5. "*cornuta* Zttst don" – a male of *Elachiptera cornuta* (Fallén).

### Friedrich Hermann Loew (1807-1879)

Loew's specimens got to St.Petersburg also via R. Osten-Sacken and are labelled "coll. Osten-Sacken" (Osten-Sacken, 1903). Most of the 35 specimens have labels with generic and species or only species names in Loew's hand. They are: 4 specimens of *Elachiptera brevipennis* Meigen, but only one labelled "*Chlorops brevipennis*"; 7 specimens of *Chlorops pumilionis* (Bjerkander), one of them labelled "*Chlorops taeniopus*", 5 labelled "*taeniopus*", and one without label (*taeniopus* Meigen is a junior synonym of *pumilionis*); 4 specimens of *Chlorops speciosus* Meigen, one of them labelled "*Chlorops speciosa*" and others "*speciosa*"; 11 specimens of *Chlorops interruptus* Meigen have only number 124 and no name label; 1 specimen is a female of *Chlorops planifrons* Loew, but without name label; 4 specimens belong to *Elachiptera cornuta* (Fallén), one of them labelled "*Crassiseta cornuta*", 2 others "*cornuta*" and one without name label; 3 specimens of *Meromyza pratorum* Meigen are labelled "*Meromyza pratorum*"; and 1 female of *Meromyza* with first flagellomere of unusual conical form, arista missing has no name label, only data "14/5/42". Geographical labels are usually absent, but some specimens have a date: *Meromyza* – "30/6/42", "23/8/40", "22/5/42", and *Chlorops* – date "23/8/40" and also "Wien H 6/1/40", "FR Hoft 41".

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