

The type specimens of Palaearctic Chloropidae (Insecta: Diptera) in the Natural History Museum in Vienna

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Abstract

The type specimens of Palaearctic Chloropidae from the collections of NHMW, described by Ch.R.W. Wiedemann, E. Heeger, Th.E. Schummel, J.G. Egger, J.R. Schiner, Th. Becker, G. Strobl, L. Czerny, and F.G. Hendel, are revised. For 8 species lectotypes are designated and for further 3 species probable type specimens are discussed. The nomina nuda *Meromyza vittata* BECKER, 1910 and *M. camporum* BECKER, 1910 are clarified. New synonyms are established: *Meromyza ornata* (WIEDEMANN, 1817) = *Meromyza sororcula* FEDOSEEVA, 1962 syn.n.; *Lasiambia fycoperda* (BECKER, 1910) = *Oscinella discreta* BEZZI, 1917 syn.n.; *Hapleginella laevifrons* (LOEW, 1858) = *Oscinella inquilina* HENDEL, 1933 syn.n.; *Meromyza nigrofasciata* HENDEL, 1938 = *Meromyza cephalata* FEDOSEEVA, 1964 syn.n.; *Oscinimorpha strobli* (CZERNY, 1909) sp.dist., is no synonym of *O. novakii* (STROBL, 1893). The relationships of the genus *Strobliola* CZERNY, 1909 are discussed. The type specimens of *Gaurax venustus* CZERNY, 1906 and *Chlorops confusus* WIEDEMANN, 1830 were not found in NHMW. The lectotype of the former is designated from the collections of the former Deutschen Entomologischen Instituts in Eberswalde.

Key words: Chloropidae, Diptera, lectotype, new synonymy, Ch.R.W. Wiedemann, E. Heeger, Th.E. Schummel, J.G. Egger, I.R. Schiner, Th. Becker, G. Strobl, L. Czerny, F.G. Hendel.

Zusammenfassung

Die Arbeit enthält eine Revision der Typen, der von Ch.R.W. Wiedemann, E. Heeger, Th.E. Schummel, J.G. Egger, I.R. Schiner, Th. Becker, G. Strobl, L. Czerny und F.G. Hendel beschrieben und im Naturhistorischen Museum Wien aufbewahrten, paläarktischen Chloropiden-Arten. Lectotypen von 8 Arten werden designiert und Syntypen von 3 weiteren Arten besprochen. Die nomina nuda *Meromyza vittata* BECKER, 1910 und *M. camporum* BECKER, 1910 werden geklärt. Folgende neue Synonymien werden festgestellt: *Meromyza ornata* (WIEDEMANN, 1817) = *Meromyza sororcula* FEDOSEEVA, 1962 syn.n.; *Lasiambia fycoperda* (BECKER, 1910) = *Oscinella discreta* BEZZI, 1917 syn.n.; *Hapleginella laevifrons* (LOEW, 1858) = *Oscinella inquilina* HENDEL, 1933 syn.n.; *Meromyza nigrofasciata* HENDEL, 1938 = *Meromyza cephalata* FEDOSEEVA, 1964 syn.n.; *Oscinimorpha strobli* (CZERNY, 1909) ist eine gute Art und kein Synonym von *O. novakii* (STROBL, 1893). Die Verwandtschaftsbeziehungen der Gattung *Strobliola* CZERNY, 1909 werden besprochen. Die Typen von *Gaurax venustus* CZERNY, 1906 und *Chlorops confusa* WIEDEMANN, 1830, wurden nicht im NHMW gefunden. Der Lectotypus von *Pseudogaurax venustus* (CZERNY, 1906) wurde aus der Sammlung des ehemaligen Deutschen Entomologischen Instituts (Eberswalde) designiert.

Introduction

Investigations of type specimens are very important, especially in those cases where the identity of the taxa is doubtful. Some Chloropidae-taxa are not correctly treated by recent workers because of inadequate descriptions.

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Many authors worked on Palaearctic Chloropidae in NHMW and described new genera and species. This paper deals with the type specimens, which are kept in the NHMW. The authors are given in chronological order (date of birth), the species in alphabetical order of the epithet. Quotations from the original description are given in small print above the material examined. All lectotypes without a reference to an author are herewith designated. Lectotypes and paralectotypes are labelled.

Meigen's types of Chloropidae from the Winthem's collection in NHMW are revised in NARTSHUK (1997). An article about Duda's types is in preparation.

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Wiedemann, Christian Rudolph Wilhelm (1770 - 1840)

confusa WIEDEMANN, 1830, 2: 597 (*Chlorops*)

"China".

Remarks: The type specimens were not found in NHMW. According to ZIMSEN (1954) one type specimen is in the Zoological Museum in Copenhagen. The author has not seen it.

BECKER (1910) and DUDA (1932 -1933) listed the species as sp. incerta. SABROSKY (1977) and after him NARTSHUK (1984) listed it as a synonym of *Thaumatomyia ornata* MEIGEN.

extranea WIEDEMANN, 1830, 2: 596 (*Chlorops*)

"China".

Lectotype (hic designatus): ♀, "extraneus / Coll. Winthem"[not Wiedemann], "Usina, extraneus Wd.", "Chlorops extranea Wied. det. Becker".

Remarks: BECKER (1910) and DUDA (1932 - 1933) recorded that the type specimen is in Vienna. Becker listed the species in the genus *Chlorops*, Duda in the genus *Eutropha*.

The lectotype is a *Chlorops* species. It agrees with the original description, except of the first flagellomere, which is pale inside at the base, not black.

A good species, *Chlorops extraneus* (WIEDEMANN, 1830).

grisea WIEDEMANN, 1830, 2: 573 (*Homalura*)

"Südrußland".

Lectotype (hic designatus): ♂, "Coll. Wiedemann", "grisea m. Rossia mer. Pallas"[big greenish-grayish label of old paper with lower corners cut out], "Rr.[or Kr.?, Krim ?] Ropke"[I cannot read this word: Ripke or Rorke or Ropke].

Paralectotype: 1 ♂, "Coll. Winthem Russ. merid. grisea det. Wied.", "Type"[red label], "Homalura grisea Wied. Russia merid."[old paper, 15x18 mm].

Remarks: The lectotype is in good condition. The paralectotype is in poor condition, parts of the thorax and scutellum are destroyed.

Some specimens were collected by Pallas in the Crimea (PONT 1995).

Homalura grisea is usually treated as a synonym of *Lipara lucens* MEIGEN, 1830 and the investigation of the type specimens confirms this view. Both species were described nearly at the same date. At the end of MEIGEN's 6th volume (1830), there is information about the second part of Wiedemann's work: "Gleichzeitig mit dem vorliegenden 6. Bande des Meigenschen Werke... erschien uns und ist durch alle Buchhandlungen des In- und Auslandes zu beziehen: Ausereuropäische zweiflügelige Insekten, beschrieben von Dr. Ch.R.W. Wiedemann. Zweiter Teil...". As the relative priority of the two works is unknown, I follow the preceding authors (BECKER 1910, DUDA 1932 - 1933) considering *H. grisea* as a junior synonym.

ornata WIEDEMANN, 1817: 86 (*Oscinis*)

Meromyza sororcula FEDOSEEVA, 1962 syn.n.

"bei Kiel, im Junius im Grase".

Holotype: ♀, "Coll. Wied[emann]", "*ornata* Kiel", "*pratorum* Mg. det. Becker".

Remarks: This name was omitted by BECKER & AL. (1905), BECKER (1910), DUDA (1932 - 1933), and NARTSHUK (1984).

The holotype of *Meromyza ornata* (WIEDEMANN, 1817) is a female of *Meromyza sororcula* FEDOSEEVA, 1962. The mark on the meron is dark, and as usually in *M. sororcula*, body length is less than in *M. pratorum* MEIGEN, 1830.

Heeger, Ernst (1783? - 1866)

numerata HEEGER, 1858: 302 (*Chlorops*)

"Sievering nächst Wien".

Lectotype (hic designatus): ♂ [between two glasses], "Diptera Cl. Insecta Fam. Muscida G. *Chlorops* sp. *numerata* Heeg. In. Austria Imago ♀ Weibchen".

Remarks: The lectotype is a male of *Gampsocera numerata*. Spots on wings, especially the anterior one, poorly developed, probably faded. The arrangement of the specimen (wings and legs apart) is like Heeger's drawing. It is very probably one of the specimens from the original series of Heeger.

Schummel, Theodor Emil (1786 - 1848)

quadristriata SCHUMMEL, 1847: 167 (*Eurina*)

"an der alten Oder bei Groschelbrücke" [published in a paper on Diptera of Silesia].

Type: ♀, small pink label, "22/4 41" [old, grayish paper], "Austria, Alte Sammlung", "pubescens det. Schiner".

Additional material: 1 ♂, "pubescens det. Schiner", "Stein" [?] [small pink label]; 1 ♀, "pubescens det. Schiner", "Coll. Winthem", "Silesia Sta...".

Remarks: BRAUER (1880: 1) recorded: "Ausserdem finden sich [in NHMW] Originale von Schummel aus der damit vereinigten Schinerschen Collection". Schiner united Schummel's specimens with other material and redetermined them. As a result a lot of data got lost.

I consider as Schummel's type a female specimen with a part of the right wing missing. It corresponds with the original description and represents *Trichieurina pubescens* (MEIGEN, 1830).

Trichieurina quadristriata (SCHUMMEL, 1847) is a junior synonym of *Trichieurina pubescens* (MEIGEN, 1830), as correctly treated by recent authors.

Egger, Johann Georg (1804 - 1866)

***calva* EGGER, 1862: 778 (*Eurina*)**

"Hungaria".

Lectotype (hic designatus): ♂, "Ungarn Frivaldsky", "calva det. Schiner".

Paralectotypes: 3 ♀♀, "Ungarn Frivaldsky", "calva det. Schiner".

Remarks: The specimens have no Egger label. All specimens are in good condition.

***scholtzii* EGGER, 1862: 778 (*Chlorops*)**

"Silesia".

Lectotype (hic designatus): ♀, "Austria Alte Sammlung", "scholtzii det. Schiner"[O. Müller's hand], "Type"[red label].

Remarks: The specimen agrees with the original description.

Current interpretation: a junior synonym of *Chlorops frontosus* MEIGEN, 1830.

Schiner, Ignaz Rudolph (1813 - 1873)

***similis* SCHINER, 1854: 172 (*Lipara*)**

"Prater in Wien".

Lectotype (hic designatus): ♂, "Austria Alte Sammlung", "Type"[red label], "similis Schiner det."[O. Müller's hand].

Paralectotypes : 10 ♂♂, 4 ♀♀, "Austria Alte Sammlung", "Type"[red label], "similis Schiner det."[O. Müller's hand].

Remarks: No specimens with label Prater or Vienna were found. All specimens agree with the original description. WENDT (1975) recorded 4 syntypes in the Zoological Museum in Berlin.

A good species, *Lipara similis* SCHINER, 1854.

***pulchrus* SCHINER, 1864: 212 (*Chlorops*)**

"Prater in Wien".

Lectotype (hic designatus): ♀, "Austria Alte Sammlung", "Type"[red label], "pulchra Schiner det.", "scalaris Mg. ♀ Duda det.".

Paralectotypes : 2 ♂♂, "Austria Alte Sammlung", "Type"[red label], "pulchra Schiner det.", "scalaris Mg. ♀ Duda det."

Remarks: Very lightly coloured specimens with an entirely yellow first flagellomere, but not to be distinguished by other characters from *C. scalaris*.

Current interpretation: a junior synonym of *Chlorops scalaris* MEIGEN, 1830.

copiosa SCHINER, 1872: 70 (*Chlorops*)

"Schlosse Krolikarnia, 1/4 Meile von Warschau."

Syntypes: many exs., in two small glass tubes, "C. copiosa Pol. Schin.", "Warschau 1871", "Chlorops copiosa", "Von Krolikarnia bei Warschau", "Massen[haft ?]".

Additional material: many exs., "Mölk 1873", "C. copiosa Schiner".

Chlorops copiosa SCHINER, 1872 is a synonym of *Thaumatomyia notata* (MEIGEN, 1830).

Becker, Theodor (1840 - 1928)

Most of the type specimens are in Berlin and Budapest, only a few in Vienna.

fycoperda BECKER, 1910: 164 (*Oscinella*)

Oscinosoma discretum BEZZI, 1917 syn.n.

"Fünf Exemplare aus Korsica, Mann".

Lectotype (hic designatus): ♂, "Mann Corsica 1855", "fycoperda Alte Sammlung", "Type"[red label], "Lebt in der wilden Feige. Ajaccio in Corsica 855".

Paralectotypes: 1 ♂, 3 ♀♀, "Mann Corsica 1855", "fycoperda Alte Sammlung", "Type"[red label], "Lebt in der wilden Feige. Ajaccio in Corsica 855".

Remarks: The specimens are glued to cards. Furthermore there are two dry, damaged fruits of *Ficus carica*, one of them with puparia visible.

The investigation of the male genitalia showed that the specimens are *Oscinosoma discretum* BEZZI, 1917, also bred from fruits of *Ficus carica*.

BECKER (1910) mentioned also two manuscript names associating with *fycoperda*: *kolenatii* as "*kolenatii* in litt. Wiener Hofmuseum" and *ichneumonea*, as *Chlorops ichneumonea* det. Winnertz in Berliner Museum N 6410, two specimens from "Krefeld, aus Käferlarven gezogen" (p.164). The last name is certain to relate to another species considering the place of development of the larvae.

I did not find specimens with label "*kolenatii*" in the collection of NHMW.

BECKER in his monograph of Palaearctic Chloropidae (1910) listed two manuscript names of Winthem: *camporum* in synonymy of *Meromyza variegata* and *vittata* in synonymy of *M. femorata* (p. 42). I found 1♂ named *vittata* and 8 specimens named *camporum* in the Winthem collection and investigated their male genitalia. The male labelled *vittata* is *Meromyza rohdendorfi* FEDOSEEVA, and a male labelled *camporum* is *Meromyza femorata* MACQUART sensu FEDOSEEVA, 1960, 1970, ISMAY, 1981. Another 4 males with label "Coll. Winthem" and one of them labelled Versailles are also *M. femorata* MACQUART in

the same sense. The same species is also represented by a male *Meromyza variegata* from Meigen's collections in Paris (ISMAY 1981).

Strobl, Gabriel (1846 - 1910)

Most of Strobl's type specimens are deposited in his collection in Admont.

hispanica STROBL, 1899: 259 (*Siphonella*)

Siphonella multicingulata STROBL, 1893 var. *hispanica* STROBL, 1899.

"Bei Algeciras ein Pärchen".

Material examined: 2 ♂♂, one without head, both on the same pin, "Südspanien G. Strobl", "Siphonella multicingulata var. hispanica m." [Strobl's hand].

Remarks: MORGE (1984) did not list type specimens of this species for Strobl's "Typensammlung" in Admont. In Strobl's collections the specimens of this species are labelled "Monfalcone" and therefore are not from the type series. The specimens of Chloropidae from Strobl's "Hauptsammlung" have not been revised yet.

I consider the two male specimens as possible syntypes of *hispanica*. They agree with the original description. Femora and tibiae are rather dark. Male genitalia (of 1 possible syntype and 2 specimens from Algeciras, Spain, collected by L. Czerny): cerci with small excision, surstyli narrowed abruptly in the apical part, epandrium in general appearance resembles that of *Aphanotrigonum fasciella* (ZETTESTEDT, 1855) and *A. femorella* COLLIN, 1946, both sensu DELY-DRASKOVITS (1981).

The probable synonymy is not discussed here, because in the revision of DELY-DRASKOVITS (1981) some species and variations from this group (*multicingulatum* STROBL, *hispanicum* STROBL, *favillaceum* BECKER, *infans* BECKER, *pallidinerve* DUDA, *postpositum* DUDA) are omitted, and their male genitalia are not known. ANDERSSON (in MORGE 1974: 413) who had seen specimens of *hispanica* (Monfalcone, Italy) from Strobl's collections supposed the probable synonymy of *hispanica* and *Aphanotrigonum femorella* COLLIN, 1946.

Czerny, Leander (1859 - 1944)

venustus CZERNY, 1906: 299 (*Gaurax*)

"Austria superior: Kremsmünster".

Lectotype (hic designatus): ♂, "Austria Kremsmünster Czerny" (former Deutsches Entomologisches Institut in Eberswalde). [The specimen is in good condition, except antennae are missing.]

Additional material: 1 ♂, 1 mouldy ex., "Aust. sup. Almsee 18. 7. 1919".

Remarks: CZERNY (1906) listed 2 ♂♂ and 1 ♀.

WENDT (1975) did not list type specimens of this species from Berlin. KANMIYA (1983) recorded that he had investigated a male in Berlin, but he did not record the labels.

The 2 specimens found in NHMW do not belong to the type series. One specimen is covered with mould. The other one, a male, is mentioned by DUDA (1932 - 1933: 79) in his Chloropidae monograph.

The lectotype is taken from the collections of the former Deutschen Entomologischen Instituts in Eberswalde. It agrees with the original description. The antennae are missing.

A good species, *Pseudogaurax venustus* (CZERNY, 1906).

***niger* CZERNY, 1906: 300 (*Gaurax*)**

"Austria superior: Stift Göttweig in Niederösterreich".

Holotype: "Gaurax niger Czerny Czerny det.", "Göttweig Niederösterreich 1/7 1906".

Remarks: The specimen agrees with the original description. Abdomen, left antenna, left posterior leg, right posterior tibia and tarsi are missing.

***nitidifrons* CZERNY in CZERNY & STROBL, 1909: 284 (*Eutropha*)**

"Tarifa".

Holotype: ♀, "Tarifa Czerny 25/4 [19]07", "Eutropha nitidifrons Cz.", "albipilosa det. Duda".

Current interpretation: a synonym of *Eutropha albipilosa* (BECKER, 1908).

***quadrifrons* CZERNY in CZERNY & STROBL, 1909: 285 (*Chlorops*)**

"Algeciras".

Holotype: ♀, "Algeciras Czerny", "Chlorops 4-maculata Czerny Type", "Chloropisca czernyi n. nom. Duda".

Remarks: Specimen covered with mould, right antenna missing. It is a typical *Thaumatomyia* specimen with a rather flat scutellum and apical setae close together. Frontal triangle large, black, with 1 row of setulae along lateral margins. First flagellomere a little wider than long, black, basal segments of antennae yellow. Gena rather wide, a little wider than length of first flagellomere.

***strobli* CZERNY in CZERNY & STROBL, 1909: 288 (*Siphonella*)**

"Monistrol".

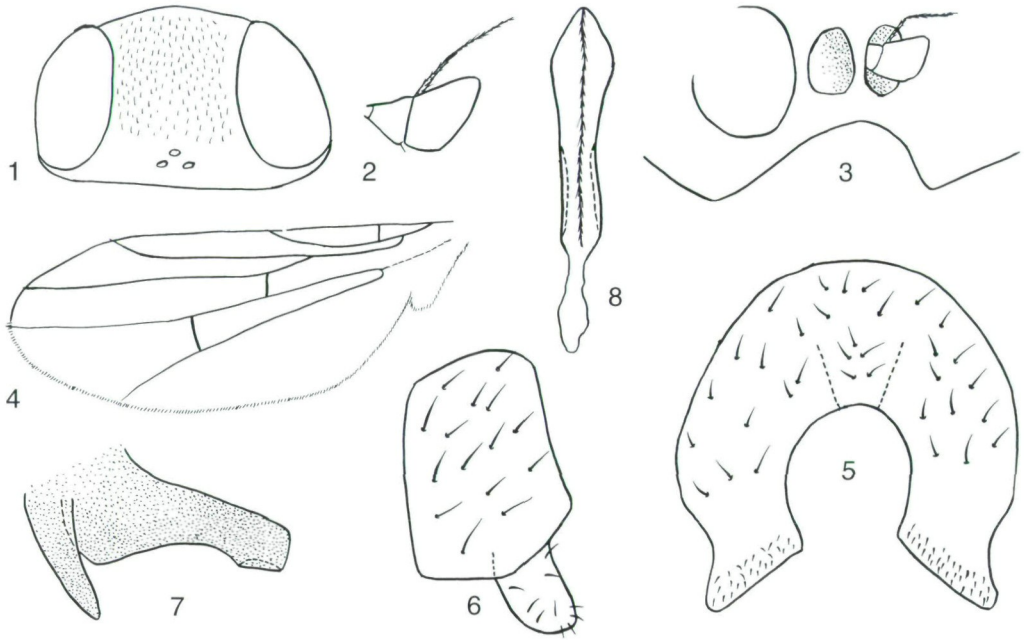
Lectotype (hic designatus): ♂, "Spanien Monistrol 15/5", "Siphonella strobli Czerny".

Paralectotype: 1 ♀ [antennae missing]; 1 ex., [only parts of head and thorax], "Spanien Monistrol 15/5", "Siphonella strobli Czerny [all three specimens on same pin, but on separate minutien].

Remarks: BECKER (1910) considered this species as distinct, DUDA (1932 - 1933) and NARTSHUK (1984) as a synonym of *Oscinimorpha novakii* (STROBL, 1893).

Face with a keel entirely separating antennae, gena produced as in *O. novakii*, with black setulae, but not black below. Frontal triangle and scutum grey, without small shining spots as in *novakii*. All setae black, notopleural bristles 1+2; pleura shining; scutellum shorter than in *novakii*, apical bristles longer than scutellum, not on small tubercles as in *novakii*; vein R_{2+3} shorter than in *O. novakii*. All femora black except on apical part, tibia and tarsi yellow, hind tibia with a black band in the middle.

It is a good species, *Oscinimorpha strobli* (CZERNY, 1909) sp.dist.



Figs. 1 - 8: (1 - 4) *Strobliola albidipennis*, (1) frons, (2) antenna, (3) face, (4) wing. (5 - 8) *Meromyza nigrofasciata*, (5) epandrium, (6) epandrium, side view, (7) gonite, side view, (8) phallus.

***albidipennis* CZERNY in CZERNY & STROBL, 1909: 290 (*Strobliola*)**

"Elche".

Paralectotypes: 1 ex., 1 ♂, 2 ♀♀, "Elche Spanien 10/5", "*Strobliola albidipennis* Czerny".

Remarks: CZERNY mentioned 10 specimens, I found only 4, all mouldy and in poor condition.

ISMAY (1997) recently revised other syntypes from Strobl's collection in Admont and designated a lectotype.

Description: Body silver grey, matt. Frontal triangle grey, not to be distinguished from the remainder of frons. Frons slightly yellowish anteriorly, covered by small setulae, head setae not distinguished. Facial keel narrow in the upper part, then widened below and joined with the gena. It entirely separates the antennal foveae. First flagellomere black, with marked upper angle. Gena under eyes equal in depth to the first flagellomere and widened posteriorly (Figs. 1 - 3). Head longer than high, postocular part of head large. Thorax rather long, with flattened scutum, setae and setulae white; pleura shining, except of the upper part of the anepisternum and katepisternum. Notopleural bristles: 1+1. Scutellum short, not longer than wide at base, apical setae shorter than scutellum. Wings whitish, narrow and rather long, costa ends between R_{4+5} and M_{1+2} ; second section of costa a little longer than the first, the third equal to $3/4$ of the second, the fourth equal to $1/2$ of the third (Fig. 4). Legs dark, only tarsi lighter. Halteres pale.

Further material is needed to clarify the relationship of the genus *Strobliola*. But it is clear, that the genera *Aphanotrigonella* NARTSHUK, 1964 and *Aprometopis* BECKER, 1910 are closely related to *Strobliola*.

Hendel, Friedrich Georg (1874 - 1936)

inquilina HENDEL, 1933: 47 (*Oscinella*) syn.n.

"Marchfeld in Niederösterreich".

Lectotype (hic designatus): ♂, "Aust. infer. Marchfeld 6.6.16 Seitner", "W[hite] Kiefer Zapfen", "Oscinella inquilina Hend., F. Hendel det."

Paralectotype: 1 ♀, "Aust. infer. Marchfeld 6.6.16 Seitner", "W[hite] Kiefer Zapfen", "Oscinella inquilina Hend., F. Hendel det."

Remarks: Both specimens represent *Hapleginella laevifrons*, a species often bred from different coniferous cones.

Hapleginella laevifrons (LOEW, 1858) = *Oscinella inquilina* HENDEL, 1933, syn.n.

nigrofasciata HENDEL, 1938: 12 (*Meromyza*)

Meromyza cephalata FEDOSEEVA, 1964 syn.n.

"Mongolei, China".

Lectotype (hic designatus): ♂, "Mongolei China Anders[son]".

Paralectotype: 1 ♀, "Mongolei China Anders[son]".

Remarks: Palpi a little darkened at tip. The structure of the male genitalia (Figs. 5 - 8) shows that *Meromyza cephalata*, described from Mongolia, is a synonym of *Meromyza nigrofasciata*.

Distribution: Russia: East Siberia, Mongolia, China (Inner Mongolia).

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