A revision of Meigen's Chloropidae collection in the Museum National d'Histoire Naturelle, Paris (Diptera)

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Chloropidae of Meigen's collection in Paris (54 species) are examined, including 35 species described by Meigen (1830, 1838). New synonymy is established: *Oscinella nigerrima* (Macquart, 1835) = *Chlorops nigritus* Meigen, 1838; *Lasiambia palposa* (Fallén, 1820) = *Chlorops ater* Meigen, 1838; *Rhopalopterum anthracinum* (Meigen, 1830) = *Chlorops glaberrimus* Meigen, 1838; *Oscinella vindicata* (Meigen, 1830) = *O. hortensis* Collin, 1946; *Meromyza variegata* Meigen, 1830 = *M. lidiae* Nartshuk, 1992; *M. femorata* Macquart, 1835 = *M. laeta* Meigen, 1838. *Chlorops lucida* Meigen, 1838 and *C. vindicata* (Meigen, 1830) are restored from synonymy and considered to be good species *Thaumatomyia lucida* (Meigen) and *Oscinella vindicata* (Meigen), respectively. Lectotypes are designated for following Meigen's species: *Eurina lurida, Chlorops calceatus, C. hypostigma, C. geminatus, C. cingulatus, C. pygmaeus, C. simplex, C. lucidus, C. femoralis, C. sulcicollis, C. glaberrimus, C. fascipes, C. nitidissimus, Meromyza pratorum, M. variegata,* and *M. laeta.* The following currently accepted synonymy is confirmed by examination of Meigen's types: *Chlorops strigulus* (Fabricius, 1794) = *C. cingulata* Meigen, 1830; *Thaumatomyia notata* (Meigen, 1830) = *C. circumdata* Meigen, 1830; *T. rufa* (Macquart, 1835) = *C. simplex* Meigen, 1838; *Siphonella oscinina* (Fallén, 1820) = *C. angustifrons* Meigen, 1830; *Elachiptera cornuta* (Fallén, 1820) = *C. femoralis* Meigen, 1838; *Rhopalopterum anthracinum* (Meigen, 1830) = *C. glaberrimus* Meigen, 1838; *Rhopalopterum fasciolum* (Meigen, 1830) = *C. fascipes* Meigen, 1838. Types of 9 species described by Meigen are found neither in MNHP, nor in NHMW. A new species *Meromyza meigeni* sp. n. is described for *M. laeta* sensu Ismay (1981) and Nartshuk (1992). *Meromyza variegata* sensu Ismay (1981), Beschovski (1985) and Nartshuk (1992) is considered to be *M. athletica* Fedoseeva, 1974, and a redescription of this species is given.

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This paper is the next attempt to clarify the identity of Chloropidae described by earlier authors. Preceding ones dealt with species described by Th. Becker and O. Duda, C. von Roser, J.W. Meigen and other authors (Nartshuk, 1970, 1994, 1997a, 1997b). Becker (1902) revised the types of species described by J.W. Meigen in the Museum National d'Histoire Naturelle in Paris (MHNP in the following text) and Naturhistorisches Museum in Vienna (NHMW in the following text). Later, I (Nartshuk, 1997) revised Meigen's types in NHMW with new synonyms and designation of lectotypes. In 2002, I had an opportunity to examine Meigen's collection in MHNP in course of preparing the Chloropidae part for the project "Fauna Europaea". After Th. Becker, Meigen's collection in MHNP was examined by E. Séguy; his paper on Chloropidae (Séguy, 1934) contained a statement "sec. typ." for 10 Meigen's species. H. Andersson has also seen the collection (pers. comm.), but did not publish the results. He mentioned only that he has seen Meigen's type of *Chlorops pygmaea* (Andersson, 1966).

Meigen's Chloropidae collection in MHNP is kept in drawers 55, 59, and 60 separately from other collections of Chloropidae. Most specimens are pinned, a few are glued on paper 2 × 5 mm. Some glued specimens are damaged, and it is believed that they were pinned previously. Each specimen described in 1830 has a square label on brownish paper with the names of the genus and species in Meigen's handwriting; species described or listed by Meigen in 1838 have on the label only the specific epithet without the generic name. In addition, every specimen has a round label with the word "Meigen" and a printed number, and each specimen in drawers 59 and 60 has another number on the back of this label. The latter numbers are accompanied by figures 40 showing registration in 1840, they are listed by me in parentheses. There are also collection labels with the names of the genus and

species. Some specimens have additional labels "Museum Paris coll." or "Museum Paris Meigen coll.".

There are 51 collection labels in Meigen's Chloropidae with 1-4 flies, pinned or glued, after each. All flies after the collection label are lost only in two cases. The collection contains 35 species described by Meigen in 1830 and 1838 and 16 species described by other authors: Linnaeus, Fallén, Fabricius and Macquart.

Species are discussed in the following text according to their arrangement in drawers. Arrangement of *Chlorops* species in Becker (1902) was different, probably the material had been moved into other drawers. Already Becker (1902) did not find types of *Chlorops fasciatus* Meigen, 1830, *C. gentilis* Meigen, 1830, *C. confluens* Meigen, 1830, *C. ruficeps* Meigen, 1830, *C. geniculatus* Meigen, 1838 (described from "coll. Baumhauer"; the type is probably in Berlin), *C. varipes* Meigen, 1838, *C. pictus* Meigen, 1838, *C. amoenus* Meigen, 1838, *C. albitarsis* Meigen, 1838, and *C. vagans* Meigen, 1838. Now, there are no collection labels for these species, except *C. vagans*. All these species, except *C. vagans*, are listed as nomina dubia in the "Catalogue of Palaearctic Diptera" (Nartshuk, 1984). Lyneborg (1965) listed *C. geniculata* as a synonym of *Thaumatomyia obscurella* (now it is *T. hallandica* Andersson), but without special explanation.

Drawer 55

Eurina lurida Meigen, 1830: 5. No. 2363. One male, in good condition, only right first flagellomere absent. The species was described from "Baumhauerischen Sammlung", type locality unknown. The specimen corresponds to the description. It is designated here as *lectotype*; there is no material in NHMW (Nartshuk, 1997a). Pont (1986: 202) wrote "I can see no reason for not regarding specimens in his [Meigen's] collection in Paris of the species described from Baumhauer's collection as being syntypes, if they agree with the original description". – Current interpretation: *Eurina lurida* Meigen.

Camarota flavitarsis Meigen, 1830: 7. No. 2365. One female (Becker, 1902 recorded one male), corresponds to the description. This specimen is a paralectotype, the lectotype is designated from Winthem's collection in NHMW (Nartshuk, 1997a). – Current interpretation: a junior synonym of *Camarota curvipennis* (Latreille, 1805).

Drawer 59

Chlorops gracilis Meigen, 1830: 140. No. 2521 (2720 40). One specimen without abdomen and hind legs; other parts in good conditions. Meigen mentioned "mein Exemplar" from vicinity of Paris. Therefore the examined specimen is interpreted as holotype. – Current interpretation: a good species *Chlorops gracilis* Meigen.

Chlorops calceata Meigen, 1830: 146. No. 2522 (2721 40). One female, corresponds to the description and recent treatment of the species. It is designated here as *lectotype*. First flagellomere on inner side yellow in central part, not entirely black. Specimens in NHMW do not correspond to the description (Nartshuk, 1997a). There is one more label "Museum Paris coll. Meigen." – Current interpretation: a good species *Chlorops calceatus* Meigen.

Chlorops ornata Meigen, 1830: 152. No. 2523. No specimen, only collection label and two holes from pins. Becker (1902) mentioned only one specimen in NHMW and did not mention any specimen in MHNP. – Current interpretation: a junior synonym of *Thaumatomyia notata* (Meigen, 1830: 144).

Chlorops hypostigma Meigen, 1830: 141. No. 2524 (2723 40). Four specimens, two of them (male and female) on one pin, both without first flagellomere. One male without head and one more specimen with abdomen in small tube on the same pin, both with additional label "Museum Paris coll." All specimens correspond to the description. The male on the pin with the female is here designated as *lectotype*; the female is a paralectotype. Becker (1902) mentioned only two specimens on a pin. – Current interpretation: a good species *Chlorops hypostigma* Meigen.

Chlorops geminata Meigen, 1830: 141. No. 2525 (2724 40). One female in good condition, designated here as *lectotype*. There are males in Winthem's collection in NHMW, but they are labelled "Halle" and do not belong to the type series (Nartshuk, 1997a). – Current interpretation: a good species *Chlorops geminatus* Meigen.

Chlorops nasuta. No. 2526 (2724 40 and 2725 40). One female in good condition and the second specimen (only thorax) are *C. meigenii* Loew (darkened wings and yellow spot on katepisternum). Meigen's specimen is not a type of *Ch. nasuta*, and there is no reason to change the current interpretation. – Current interpretation: *Musca nasuta* Schrank, 1781 is a junior synonym of *Chlorops pumilionis* (Bjerkander, 1778). Loew (1866) correctly named *Chlorops nasuta* sensu Meigen as *C. meigenii* Loew.

Chlorops scalaris Meigen, 1830: 145. No. 2527 (2726 40). One female without antennae and right wing, corresponds to the description: enlarged palpi, black shining spot on katepisternum, ocellar triangle black with narrow yellow sides and yellow hind corners. This female is a

paralectotype, the lectotype is designated from Winthem's collection in NHMW (Nartshuk, 1997a). – Current interpretation: a good species *Chlorops scalaris* Meigen.

Chlorops speciosa Meigen, 1830: 146. No. 2528 (2727 40). One female, of rather large size, corresponds to the description, paralectotype. The lectotype is designated from Winthem's collection in NHMW (Nartshuk, 1997a). – Current interpretation: a good species *Chlorops speciosus* Meigen.

Chlorops cingulata Meigen, 1830: 146. No. 2529 (2728 40). One female without antennae, with other parts in good conditions, corresponds to the description. It is designated here as *lectotype*. – Current interpretation: junior synonym of *Chlorops strigulus* (Fabricius, 1794); synonymy confirmed here.

Chlorops strigula. No. 2530 (2729 40). Two females, both are *C. pumilionis* Bjerkander, 1778, one of them has an additional label "Museum Paris coll." Meigen's specimens are not types, there is no reason for nomenclature change. – Current interpretation: a good species *Chlorops strigula* (Fabricius, 1794). *Note*: According to Zimsen (1964), the type is in MHNP, but I have not seen it. Séguy (1934) listed "*Chlorops strigula* Meigen (sec. *typ.*)" as a synonym of *Chlorops pumilionis* Bjerkander, and "*Chlorops cingulata* Meigen (sec. *typ.*)" as a synonym of *Chlorops strigula* Fabricius, but he did not mention Fabricius type.

Oscinis cereris. No. 2531 (2730 40). Three specimens, one of them is glued. Two females with dark arista in good condition, one of them has additional words "v. Fall." on the label, both are *Cetema* spp. One male is *Cetema myopinum* Loew, specimen in good condidion. All specimens are not types. – Current interpretation: *Cetema cereris* (Fallén, 1820). The lectotype is in Zoological Museum of Lund University (Andersson, 1963).

Chlorops messoria. No. 2532 (2731 40). One female in good condition, is *Diplotoxa messoria* (Fallén, 1820). The specimen is not a type. – Current interpretation: *Diplotoxa messoria* (Fallén, 1820). The lectotype is in Zoological Museum of Lund University (Andersson, 1963).

Chlorops taeniopa Meigen, 1830: 144. No. 2533 (2732 40). One female, without left flagellomere and part of legs and with damaged right wing. It is a light coloured specimen of *C. pumilionis* (Bjerkander, 1787); ocellar triangle mostly yellow, except for black ocellar tubercle and middle line, other characters correspond to *C. pumilionis*. It is a paralectotype, the lectotype is designated from Winthem's collection in NHMW (Nartshuk, 1997a). – Current interpretation: a junior synonym of *Chlorops pumilionis* (Bjerkander, 1787).

Chlorops lineata. No. 2534 (2733 40). Two females, one of them with label "*Chloropisca glabra* Meig. (det. Th. Becker, 1901)", specimen in good condition but without right first flagellomere. Another female without head, has additional text "v. Fall." on the label. Both are *Thaumatomyia glabra* (Meigen). The specimens are not types. Becker (1902) mentioned only a female in Paris as *Chloropisca glabra*. – Current interpretation: *Musca lineata* Fabricius, 1781 is considered now a junior synonym of *Chlorops pumilionis* (Bjerkander, 1787). According to Zimsen (1964), Fabricius's type is lost: "Kiel only the namelabel".

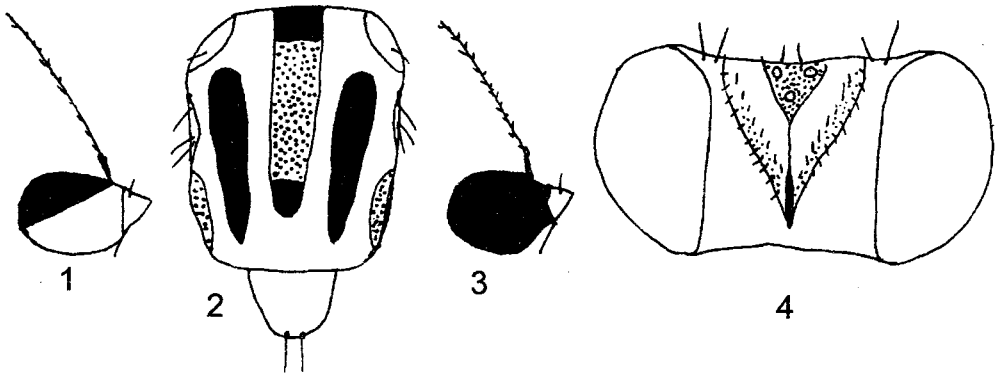
Chlorops circumdata Meigen 1830: 147. No. 2535 (2734 40). One female without head, damaged by insects. Scutellum flat, apical setae approximated, stripes on scutum as in *Thaumatomyia notata* Meigen. The specimen is designated here as *lectotype*, it corresponds to the description. Meigen described the species from Winthem's collection, but specimens in Winthem's collection in NHMW do not belong to the type series (see Nartshuk, 1997a, p. 393). – Current interpretation: junior synonym of *Thaumatomyia notata* (Meigen, 1830); synonymy confirmed here.

Chlorops limbata Meigen, 1830: 150. No. 2536 (2735 40). On the label, only "*limbata*", without generic name. The specimen, a female, glued, is *Lasiosina brevisurstylata* Dely-Draskovits, 1977. Ocellar triangle with shining rhomboid spot on the tip; legs entirely yellow; only one hind notopleural seta; first flagellomere black; palpi not seen. The species was described from Winthem's collection, and the lectotype of *C. limbatus* Meigen was designated from collection in NHMW (Nartshuk, 1997a). – Current interpretation: a good species *Chlorops limbatus* Meigen, 1830, a senior synonym of *C. brevimanus* Loew, 1866 (Nartshuk, 1997a).

Chlorops tarsata. No. 2537 (2736 40). One female in good condition, is *Cryptonevra flavitarsis* (Fallén, 1820). The specimen is not a type. – Current interpretation: a good species *Neohaplegis tarsata* (Fallén, 1820). The lectotype is in Zoological Museum of Lund University (Andersson, 1963).

Chlorops pygmaea Meigen, 1838: 385. No. 2538 (2737 40). One male, glued, but was probably pinned previously; right side of thorax damaged. Cheeks produced, stripes on scutum brownish. The specimen is here designated as *lectotype*. – Current interpretation: a good species *Trachysiphonella pygmaea* (Meigen, 1838). Andersson (1966), who has seen Meigen's type, considered *T. pygmaea* to be a good species.

Chlorops simplex Meigen, 1838: 385. No. 2539 (2738 40). One specimen, glued, tip of ab-



Figs 1-4. *Thaumatomyia*. **1**, **2**, *T. simplex* (Meigen), lectotype (1, antenna; 2, scutum); **3**, **4**, *T. lucida* (Meigen), lectotype (3, antenna; 4, frons).

domen not seen (female, according to Becker, 1902), additional label "Museum Paris Meigen". The specimen has strongly damaged right side of head and thorax; left wing and scutellum absent. Median stripe on scutum does not extend to scutellum and red in the middle (Fig. 2). Ocellar triangle yellow, extending to front of frons, with one row of setulae along sides. First flagellomere longer than deep, yellow, darkened above (Fig. 1). Meigen stated: "Schildchen gelb, flach". The specimen is designated here as *lectotype*. – Current interpretation: junior synonym of *Thaumatomyia rufa* (Macquart, 1835); synonymy confirmed here.

Chlorops lucida Meigen, 1838: 384. No. 2540 (2739 40). One female, with label "*lucida*" (without generic name), and additional label "Museum Paris Meigen". The specimen corresponds to the description. Meigen stated: "Schildchen gelb, flach." Ocellar triangle shining, extends nearly to front of frons, yellow, but ocellar tubercle, sides and middle line black. There are a small ridge on apical part of triangle and two rows of setulae along sides (Fig. 4). Cheeks narrow, as fore tibia. First flagellomere round, black (Fig. 3). Stripes on scutum black; median stripe does not extend to scutellum. Scutellum flat; apical setae approximated. The specimen is designated here as *lectotype*. It is a species of *Thaumatomyia*, very similar to *T. notata* (Meigen, 1830), but small ridge on apical part of ocellar triangle distinguish it from *T. notata*. Therefore, I prefer to consider it a good species *Thaumatomyia lucida* (Meigen, 1838); the species name is restored from synonymy with *T. notata*. Becker (1902) wrote that *Chlorops lucida* is not identical with *Chloropisca ornata* (a synonym of *Thaumatomyia notata*).

Chlorops palposa. No. 2541 (2740 40). One female, with additional inscription "von Fallén", belongs to *Lasiambia palposa* (Fallén, 1820). It is not a type. – Current interpretation: a good species *Lasiambia palposa* (Fallén, 1820). The lectotype is in Riksmuseum in Stockholm (Andersson, 1963).

Chlorops phaeoptera Meigen, 1830: 153. No. 2542 (2741 40). One specimen without tip of abdomen (Becker, 1902 listed the specimen as female) and right flagellomere, corresponds to the description. The specimen is a paralectotype. The lectotype is designated from the NHMW collection (Nartshuk, 1997a). – Current interpretation: junior synonym of *Capnoptera scutata* (Rossi, 1790).

Chlorops rufipes Meigen, 1830: 154. No. 2543 (2742 40). On the back side of the Meigen's label is a striked out inscription "*Chlorops frontella*". It is a female with entirely yellow legs, belonging to *Conioscinella mimula* Collin. This specimen does not correspond to the description. The species was described from Winthem's collection and the lectotype was designated from NHMW (Nartshuk, 1997a). – Current interpretation: junior synonym of *Oscinisoma cognatum* (Meigen, 1830).

Chlorops laevigata. No. 2544 (2743 40). Specimen without head and abdomen, only thorax remained on the thick pin. Thorax black, shining. Legs dark; halteres yellow. Becker (1902) mentioned a strongly damaged specimen. – Current interpretation: *Madiza laevigata* Fallén, 1820 is a junior synonym of *Neohaplegis tarsata* (Fallén, 1820).

Chlorops pusilla Meigen, 1830: 157. No. 2545 (2744 40). One female, without head, right wing and part of legs. Only a middle leg, a hind leg and another hind femur are preserved. Middle tibia entirely yellow; hind leg black, except for tarsus. Scutum dusted; notopleural setae 1+2. Becker (1902) mentioned one damaged speci-

men. It is a specimen of *Oscinella*; it is strongly damaged and cannot help to clarify the case with *Oscinella pusilla*. See Nartshuk, 1997a: 401.

Chlorops lepida Meigen, 1830: 157. No. 2546 (2745 40). One specimen without abdomen, right wing and hind legs. Fore and middle femora black with yellow apex, tibiae and tarsi yellow, but the last segment slightly darkened. – Current interpretation: a junior synonym of *Rhodesiella plumiger* (Meigen, 1830). The lectotype is designated from the NHMW collection (Nartshuk, 1997a); it has the last segment of tarsi darkened as well.

Chlorops angustifrons Meigen, 1830: 157. No. 2547 (2746 40). One female, designated here as *lectotype*. It corresponds to the description. – Current interpretation: junior synonym of *Siphonella oscinina* (Fallén, 1820); synonymy confirmed here.

Chlorops cornuta. No. 2548 (2747 40). One male of *Elachiptera cornuta* (Fallén, 1820) with yellow legs. Another male is *E. diastema* Collin, 1946; apical setae widely spaced; dusting before scutellum is not seen, as the scutum is covered with artificial dust. Both specimens are not types. – Current interpretation: *Elachiptera cornuta* (Fallén, 1820). The lectotype in Zoological Museum of Lund University (Andersson, 1963).

Chlorops femoralis Meigen, 1838: 390. No. 2549 (2748 40). One male, glued, in good condition, only right apical seta of scutellum broken. It is *Elachiptera cornuta* (Fallén, 1820) with black femora. The specimen is here designated as *lectotype* (Meigen listed two specimens). – Current interpretation: junior synonym of *Elachiptera cornuta* (Fallén, 1820); synonymy confirmed here. *E. cornuta* is a widespread species rather variable in the colour of legs and thickness of the arista. Additional studies are needed of quite many described related species and forms to clarify their taxonomic status.

Chlorops minuta. No. 2550 (2749 40). One female, glued, in good condition, is *Oscinella frit* (Linnaeus, 1758), s. l. Meigen described no species with the name *minuta* in Chloropidae and described *Ephydra minuta* Meigen, 1830: 124 in Ephydridae. There is no species *minuta* in Meigen's Ephydridae collection in MHNP. Becker (1902: 312) mentioned no *Chlorops minuta*, only *Ephydra minuta* specimen in NHMW.

Chlorops atra Meigen, 1838: 388. No. 2551 (2750 40). One female, glued, with additional label "Paris Museum, coll. Meigen". The specimen corresponds to the description and belongs to *Lasiambia palposa* (Fallén, 1820). *npl* 1+1, wing cell *ba* not widened. This specimen is designated here as *lectotype*. Synonymy with *Polyodaspis sulcicollis* (Meigen, 1830) given by Duda (1932-33) and Nartshuk (1984) is incorrect. – Current interpretation: *Chlorops ater* Meigen, 1838, **syn. n.** is a junior synonym of *Lasiambia palposa* (Fallén, 1820).

Chlorops brevipennis Meigen, 1830: 152. No. 2552 (2751 40). Two specimens, one female (or male?) pinned, and another female glued. Both specimens with short wings, in good condition; they are paralectotypes. The lectotype is designated from Winthem's collection in NHMW (Nartshuk, 1997a). – Current interpretation: a good species *Elachiptera brevipennis* (Meigen).

Chlorops albiseta Meigen, 1830: 153. No. 2553 (2752 40). Two specimens. One female in good condition, except absence of right wing; the white arista is well seen. The other female with broken both first flagellomeres, but wings darkened, legs black as in *Oscinella maura* (Fallén, 1820). I consider both females to be paralectotypes, although Becker (1902) mentioned no specimens in MHNP. The lectotype is designated from Winthem's collection in NHMW (Nartshuk, 1997a). – Current interpretation: a junior synonym of *Oscinella maura* (Fallén, 1820).

Chlorops maura. No. 2554 (2753 40). Only "*maura*" on the label, without generic name. One female, pinned, is a species of Agromyzidae. Another female, glued, a specimen in good condition, but without fore legs; middle tibiae yellow; hind tibiae black. It is *Oscinella frit* (Linnaeus, 1758), s. l. Both specimens are not types. Becker (1902) listed one female in Paris. – Current interpretation: *Oscinella maura* (Fallén, 1820).

Chlorops vindicata Meigen, 1830: 160. No. 2555 (2754 40). Three specimens. One female pinned, in good condition, with hind tibia black, fore and middle tibia black with both ends yellow corresponds to the description and is *Oscinella hortensis* Collin, 1946. Another female, glued, in good condition, with darker legs, is *O. frit* (Linnaeus, 1758), s. l. The third specimen is a male of *O. angustipennis* Duda, it has an additional label "Museum Paris coll." with glued red square 3 × 3 mm. Becker (1902) mentioned "in Pariser Museum 1 ♀". The lectotype was designated from Winthem's collection in NHMW (Nartshuk, 1997a). Only one pinned specimen (female) is similar to the lectotype and here considered a paralectotype. *C. vindicata* Meigen, 1830 was listed as a synonym of *Oscinella pusilla* (Meigen, 1830) by Nartshuk (1984). Now, the species is restored from synonymy and considered a good species. – Current interpretation: *Oscinella vindicata* (Meigen, 1830) is a good species and *O. hortensis* Collin, 1946, **syn. n.** is its junior synonym. I did not synonymize these species earlier (Nartshuk, 1997a), before examination of specimens in MHNP.

Chlorops frit. No. 2556 (2755 40). Label only "*frit*", without generic name. Two specimens, both glued. A male with very narrow cheek is *Oscinella cariciphila* Collin, 1946; in female cheeks are not seen, fore and middle legs black. There is a third pin with a piece of paper but without fly. The specimens are not types. Becker (1902) listed only one specimen. – Current interpretation: *Oscinella frit* (Linnaeus, 1758).

Chlorops lineella. No. 2557 (2756 40). There is a mark of female (♀) on the label. One female in good condition, but apical setae of scutellum broken. Scutellum black with yellow tip, legs entirelly yellow. It is *Tricimba cincta* Meigen, 1830. The specimen is not a type. – Current interpretation: *Tricimba lineella* (Fallén, 1820). The lectotype is in Riksmuseum in Stockholm (Andersson, 1963).

Chlorops sulcicollis Meigen, 1830: 387. No. 2558 (2757 40). One female, glued, cheeks strongly produced, yellowish, antennal fovea entirely separated by facial keel. Antennae dark. The specimen corresponds to the description and is designated here as *lectotype*. – Current interpretation: a good species *Polyodaspis sulcicollis* (Meigen, 1830).

Chlorops vagans Meigen, 1838: 389. No. 2559 (2758 40). Only "*vagans*", without generic name, on the label. No specimen, only a piece of paper on pin. Becker (1902) wrote "leere Nadel". – Current interpretation: a good species *Dicraeus vagans* (Meigen, 1838). The only European species with partly yellow thorax. Collin (1946) published a figure of the male genitalia, and the species is easily distinguished.

Chlorops glaberrima Meigen, 1838: 389. No. 2560 (2759 40). Only "*glaberrima*", without generic name, on the label. There is also a label "Museum Paris coll. Meigen". One female, glued, without head and part of legs (left fore leg and both hind legs absent, except coxae). Body with greenish lustre, preserved legs entirely yellow. The specimen corresponds to the description. It is a female of *Rhopalopterum anthracinum* (Meigen, 1830). Becker (1902) named the female in Paris as *Oscinis* s. str. The specimen is here designated as *lectotype*. – Current interpretation: junior synonym of *Rhopalopterum anthracinum* (Meigen, 1830); synonymy confirmed here.

Chlorops fascipes Meigen, 1838: 388. No. 2561 (2760 40). Only "*fascipes*", without generic name, on the label. There is an additional label "Paris Museum coll. Meigen". One male, glued, in rather good condition, only arista and left flagellomere broken. Legs mostly yellow with middle tibia dark. Becker (1902) mentioned one female and identified it as *Oscinis* s. str. The specimen is *Rhopalopterum fasciolum* (Meigen, 1830) and is designated here as *lectotype*. – Current interpretation: junior synonym of *Rhopalopterum fasciolum* (Meigen, 1830); synonymy confirmed here.

Chlorops nitidissima Meigen, 1838: 388. No. 2562 (2761 40). Only "*nitidissima*", without generic name, on the label. There is an additional label "Museum Paris coll. Meigen". One female, glued, in rather good condition, only left flagellomere and part of right arista broken. Scutum shining, cheek nearly as first flagellomere, all femora black, fore tibia slightly darkened in the middle, middle tibia yellow, hind tibia black, tarsi yellowish. The specimen corresponds to the description and is designated here as *lectotype*. – Current interpretation: a good species *Oscinella nitidissima* (Meigen, 1838).

Drawer 60

Chlorops longula Meigen, 1838: 389. No. 2563 (2762 40). One specimen, glued, tip of abdomen broken. Meigen's description: "Kopf, Fühler und Stirne rothgelb". The examined specimen has antennae, including basal segments, black, palpi with darkened tip, not enlarged. Ocellar triangle black with yellow sides. Stripes on scutum black dusted, narrow; middle stripe short; outer lateral stripe very narrow, as stroke. Abdomen brownish dorsally and ventrally, like in female of *C. varsoviensis* Becker. Pleura darkened and with shining blackish marks. Anepisternum with whitish setulae. Basitarsus of fore leg long. The specimen does not correspond to the description, it is a female of *C. varsoviensis* Becker, 1910. Becker (1902) only mentioned that the specimen in NHMP is a female. – Current interpretation: *Chlorops longula* Meigen, 1838, nomen dubium.

Chlorops hyalipennis Meigen, 1838: 389. No. 2564 (2763 40). No specimen, only a piece of paper on pin. Becker (1902) mentioned one male, *Oscinis* sp. – Current interpretation: *Chlorops hyalipennis* Meigen, 1838, nomen dubium.

Chlorops nigrita Meigen, 1838: 391. No. 2565 (2764 40). One female, in rather good condition, only right flagellomere broken. Legs entirely black, only tarsi brownish. Cheek as wide as first flagellomere. It is *Oscinella nigerrima* (Macquart, 1835). The species was considered a junior synonym of *O. frit* Linnaeus (Duda, 1933) or a good species (Collin, 1946; Nartshuk, 1984). – Current interpretation: *Chlorops nigritus* Meigen, 1838, **syn. n.** is a junior synonym of *Oscinella nigerrima* (Macquart, 1835).

Chlorops polita. No. 2566 (2765 40). Label: "*polita* Mg. Bayern". Meigen (1838: 394) listed *Chlorops polita* Macquart. Two specimens, glued, and one piece of paper without fly. Both specimens are *Psilopa* sp. (Ephydridae). Cogan (1984:

141) listed *Psilopa polita* (Macquart, 1835: 524, as *Hydrellia*), but Macquart described also *Oscinis polita* Macquart, 1835: 603. The last species is considered nomen dubium (Nartshuk, 1984).

Chlorops exornata, no number on collection label (2766 40). No description or mention of species with this name is found by me in Meigen (1830, 1838) and it is not listed within Acalyptratae in both catalogues of Palaearctic Diptera (Becker et al., 1905; Soos & Papp, 1984). One male in good condition, is *Chlorops speciosus* Meigen. The name *Chlorops exornata* is a nomen nudum (name in collection).

Meromyza pratorum Meigen, 1830: 165. No. 2567 (2767 40). Two females, one of them with genitalia in a tube on the same pin and the label "*Meromyza pratorum*"; another female with the label "*pratorum*", without generic name. Both females in good condition and correspond to the description. The female with the genitalia in a tube is designated here as *lectotype*, the other female is a paralectotype. – Current interpretation: a good species *Meromyza pratorum* Meigen, 1830.

Meromyza variegata Meigen, 1830: 165. No. 2568 (2768 40). One male and two females. Male with genitalia in a tube on the same pin, examined by Ismay (1981). Labels of pins with a male and a female only with specific name without generic name, another female without label at all. Both females are *M. femorata* Macquart sensu Fedoseeva (1960, 2003) and Ismay (1981): palpi black in apical half, scutal stripes red and no mark on scutellum (possible to see only in a female), hind femora strongly thickened. The male is another species. In the male, palpi narrowly blackish at apex, scutal stripes reddish, mark on scutellum not seen (the pin goes through the scutellum), femora moderately swollen, 2.5 times as thick as tibia. Surstyli rather long and directed laterally. Fore process of postgonites narrower than in *M. femorata* and aedeagus with bifurcated base (Figs 5-9). In *M. femorata*, the aedeagus is with arrow-shaped base. I know only one species of *Meromyza* with bifurcate base of aedeagus, *M. lidiae* Nartshuk described from Finland, Russia (Leningrad and Moscow provinces) and Bulgaria (Nartshuk, 1992). Other characters of Meigen's specimen also correspond to *M. lidiae* (Figs 11-16). *M. variegata* on Meigen's drawing (Morge, 1976: Tafel 162, *13*) has reddish scutal stripes and no mark on scutellum; unfortunately, the palpi are not figured and their colour not mentioned in Meigen's description. The male is designated here as *lectotype*. – Current interpretation: *Meromyza lidiae* Nartshuk, 1992, **syn. n.** is a junior synonym of *M. variegata* Meigen, 1830.

Notes on *M. variegata* sensu Fedoseeva (1960, 2003), Ismay (1981) and Nartshuk (1992) are given at the end of the paper.

Meromyza saltatrix. No. 2569 (2769 40). Two specimens. There are marks males on the labels, but the specimens are females of *Meromyza triangulina* Fedoseeva with narrow hind femora, black setulae on cheeks and black sides of ocellar triangle. Both specimens are not types. – Current interpretation: a good species *Meromyza saltatrix* (Linnaeus, 1761).

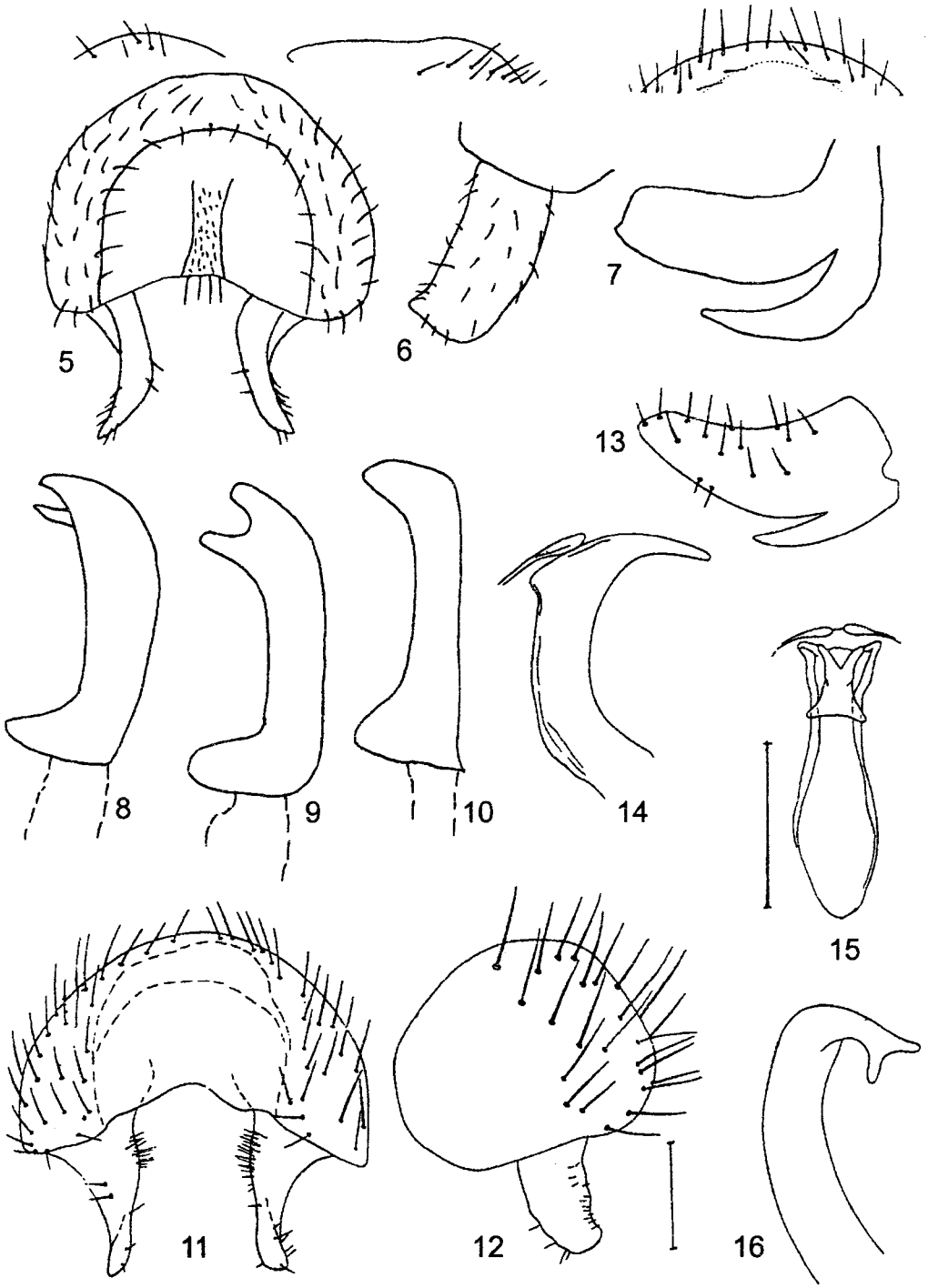
Meromyza laeta Meigen, 1838: 395. No. 2570 (2770 40). One female, rather large, with black apices of palpi, red stripes on scutum and strongly swollen hind femora. The specimen corresponds to *Meromyza femorata* Macquart, 1835 sensu Fedoseeva (1960, 2003) and Ismay (1981). Becker (1902) mentioned that the specimen has black apices of palpi and considered the species to be identical with *M. variegata* Meigen. Meigen mentioned red scutal stripes and gave no note on the thickness of hind femora and colour of palpi. There is no illustration in Meigen's "Dipteren-Farbtafeln" (Morge, 1976). Based on the red scutal stripes, I consider this specimen as corresponding to the description and designate it here as *lectotype*. Black apices of palpi, red stripes on scutum, and especially thick hind femora are characteristic of *M. femorata* Macquart. – Current interpretation: *Meromyza laeta* Meigen, 1838, **syn. n.** is a junior synonym of *Meromyza femorata* Macquart, 1835.

Meromyza laeta sensu Fedoseeva (1960, 2003), Ismay (1981) and Nartshuk (1992) is described below as *Meromyza meigeni* sp. n. (description at the end of the paper).

Meromyza nigriventris. No. 2571 (2771 40). One female with wide black stripes on scutum, black abdomen, black palpi, corresponds to *Meromyza nigriventris* Macquart, 1835. – Current interpretation: a good species *Meromyza nigriventris* Macquart, 1835.

Notes on *Meromyza* with description of a new species

Meigen and other early authors did not include drawings or characteristics of the male genitalia in descriptions of new species of *Meromyza*. Now, correct identification of most species is impossible without examination of the male genitalia. Fedoseeva (1960) published drawings of the male genitalia of many European species before the type specimens were examined, based only on other characters, mainly on colour. Therefore, controversial opinions exist on identity of some species and food-plants of their larvae, especially for *M. femorata* and *M. variegata*. Fedoseeva (1960, 2003) named the grass *Daclylis*



Figs 5-16. *Meromyza variegata* Meigen, male genitalia (5-10, lectotype, orig.; 11-16, from Nartshuk, 1992, as *M. lidiae* Nartshuk). **5, 11**, epandrium; **6**, sursylus, lateral view; **7, 13**, postgonites, lateral view; **8-10, 14-16**, aedeagus in different positions; **12**, epandrium, lateral view. Scale line: 0.1 mm.

glomerata as the food-plant of *M. femorata* and *Phleum pratense*, as that of *M. variegata*. However, the European authors listed *Daclylis glomerata* as the food-plant of *M. variegata*. Examination of the types of two Meigen's species results in description of a new European species and change of interpretation of another species.

Meromyza meigeni sp. n.
(Figs 17-25)

= *Meromyza laeta* sensu Ismay (1981) and Nartshuk (1992).

Holotype: ♂, **Slovenia**, Postoina, 13.VII-1.VIII.1958, edge of mixed forest, R.L. Coe.

Paratypes. **Slovenia:** 2 ♂, same data as in holotype; **Italy:** a series, Zuel, near Cortina, 13.VIII.1969, V.F. Eastop (determined as *Meromyza laeta* by J. Hubicka).

The holotype and both paratypes from Slovenia are deposited at Zoological Institute, Russian Academy of Sciences, St.Petersburg; they were determined by E.P. Nartshuk as *Meromyza laeta* and so listed by Coe (1968). The paratypes from Italy are kept at the Natural History Museum, London; they are included in the type series on the basis of drawings of the male genitalia by Ismay (1981), who listed these specimens as *M. laeta* Meigen.

Description. Body yellow. Frons yellow, slightly longer than wide, covered with short black setulae; head setae black. Setae *vte* the longest, 3 times as long as *vti* and twice as long as *poc*. Ocellar triangle yellow, finely rugose, extending to nearly 2/3 of frons. Parafacialia half as wide as first flagellomere. Genae subequal in width to first flagellomere. First flagellomere slightly longer than deep, yellow, slightly darkened above. Arista dark. Palpi narrow, yellow, narrowly black at apex. Scutum longer than wide. Scutal stripes mainly red; outer lateral stripes brownish. Borders of scutal stripes diffuse, not sharp, especially hind end of central stripe. Pleura yellow with reddish mark on katepisternum and katepimeron. Hind femora moderately swollen, no more than 2.5 times as thick as tibia. Abdomen with central line of black spots, and tergites brownish in fore 2/3 or sometimes without spots. Epandrium small, with short setae; surstyli short. Postgonites black. Anterior process of postgonites rather narrow and rounded. Aedeagus narrow, with arrow-shaped base. Body length 2.0-2.5 mm.

Distribution. A species of South European distribution: Slovenia, Italy. Ismay (1981) did not found the species in England.

Note. *Meromyza laeta* sensu Fedoseeva (1960, 2003) and Beschovski (1985) is probably the same species, it has the same structure of postgonites (Fig. 26) and some other characters, as the shape of the first flagellomere, size and colour of scutum, colour of abdomen, thickness of hind femora. However, there are some differences: larger size of body (3.0-3.5 mm), mark on scutellum in the species described by Fedoseeva. In the description by Fedoseeva (1960), the palpi are described as narrow, in keys of Fedoseeva (2003) and Beschovski (1985) palpi are characterised as swollen. I have seen only a female determined by Fedoseeva as *M. laeta* Meigen. Only postgonites of the male genitalia are illustrated in Fedoseeva's paper, they correspond well to drawings by Ismay (1981) and Nartshuk (1992), but other structures of the male genitalia of her specimens are unknown. *M. laeta* sensu Fedoseeva occurs in Russia north to Moscow and east to Kemerovo, in Ukraine, and Kazakhstan (Fedoseeva, 1960). Fedoseeva (1960) noted that this species occurs in dry sandy places in Moscow Province, host-plants are *Agrostis vulgaris* With. and *Festuca rubra* L. Beschovski (1985) recorded the species from Bulgaria, Albania, Macedonia and Bosnia.

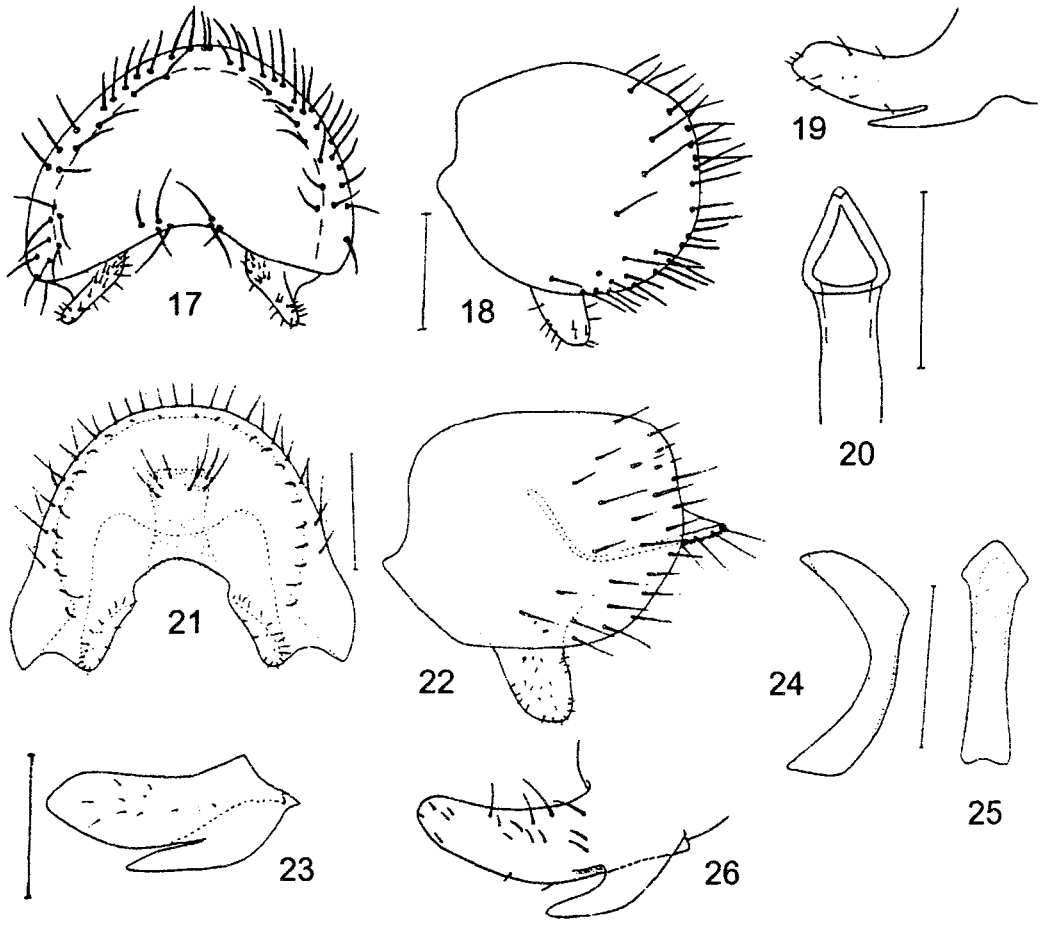
Meromyza athletica Fedoseeva, 1974
(Figs 27-40)

= *Meromyza variegata* sensu Ismay (1981), Beschovski (1985) and Nartshuk (1992).

Description. Body yellow. Frons yellow, slightly longer than wide, covered with short black and white setulae; setae black. Setae *vte* the longest, *vti* and *poc* very small. Ocellar triangle yellow, rugose in apical part, extending nearly to 2/3-3/4 of frons. Parafacialia narrower than genae. Genae equal in width to first flagellomere. First flagellomere slightly longer than wide, yellow, slightly darkened above. Arista dark. Palpi narrow, yellow. Scutum longer than wide. Central scutal stripes red, short, sharply bordered, not extending to scutellum by distance equal to scutellum. Inner part of inner lateral stripes reddish, remainder part and outer lateral stripes black dusted, or both lateral stripes black. Pleura yellow with reddish mark on katepisternum and katepimeron. Hind femora strongly swollen, 3.5-4.0 times as thick as tibia. Abdomen with three black spots on tergites. Epandrium rather large, with short setae. Surstyli short, squared or slightly rounded apically. Postgonites black. Anterior process of postgonites moderately massive, with short acute tip and convex upper margin near tip. Aedeagus with median constriction and two projections in lateral view. Body length 3.5-4.0 mm.

Distribution. Southern part of European Russia north to Kursk, Ukraine, Georgia, Bulgaria, Great Britain. Host-plant: *Phleum pratense* (Fedoseeva, 2003).

Note. Fedoseeva (1974) described this species from the south of the European part of the former



Figs 17-26. *Meromyza meigeni* sp. n. (17-20, from Nartshuk, 1992, as *M. laeta*, paratype; 21-23, from Ismay, 1981, as *M. laeta*; 26, *M. laeta* sensu Fedoseeva, 2003). **17, 21**, epandrium, ventral view; **18, 22**, epandrium, lateral view; **19, 23, 26**, postgonites, lateral view; **20, 24, 25**, aedeagus in different positions. Scale line: 0.1 mm.

USSR, she compared it with *M. variegata* sensu Fedoseeva (1960), and the recorded differences were insignificant. The main difference is in the shape of postgonites (Figs 38, 39). I have seen a paratype of *M. athletica* and examined the male genitalia of another specimen determined as *M. athletica* by Fedoseeva. The shape of postgonites is the same as figured by Fedoseeva (1960, 2003), Ismay (1981), Beschovski (1985) and Nartshuk (1992) for *M. variegata,* but not as figured by Fedoseeva (1974, 2003) for *M. athletica.* Fedoseeva never figured other parts of the male genitalia of her *M. variegata,* but gave a drawing of the aedeagus of *M. athletica* (Fig. 40), in which is well visible the projected base of aedeagus, as figured by Ismay (1981) and Nartshuk (1992) for *M. variegata*. On these grounds, I consider *M. variegata* sensu Ismay (1981), Beschovski (1985) and Nartshuk (1992) to be *M. athletica* Fedoseeva (1974). The difference in the shape of postgonites in the drawing of *M. athletica* by Fedoseeva (1974, 2003) is explained, in my opinion, by not strongly lateral position of this structure.

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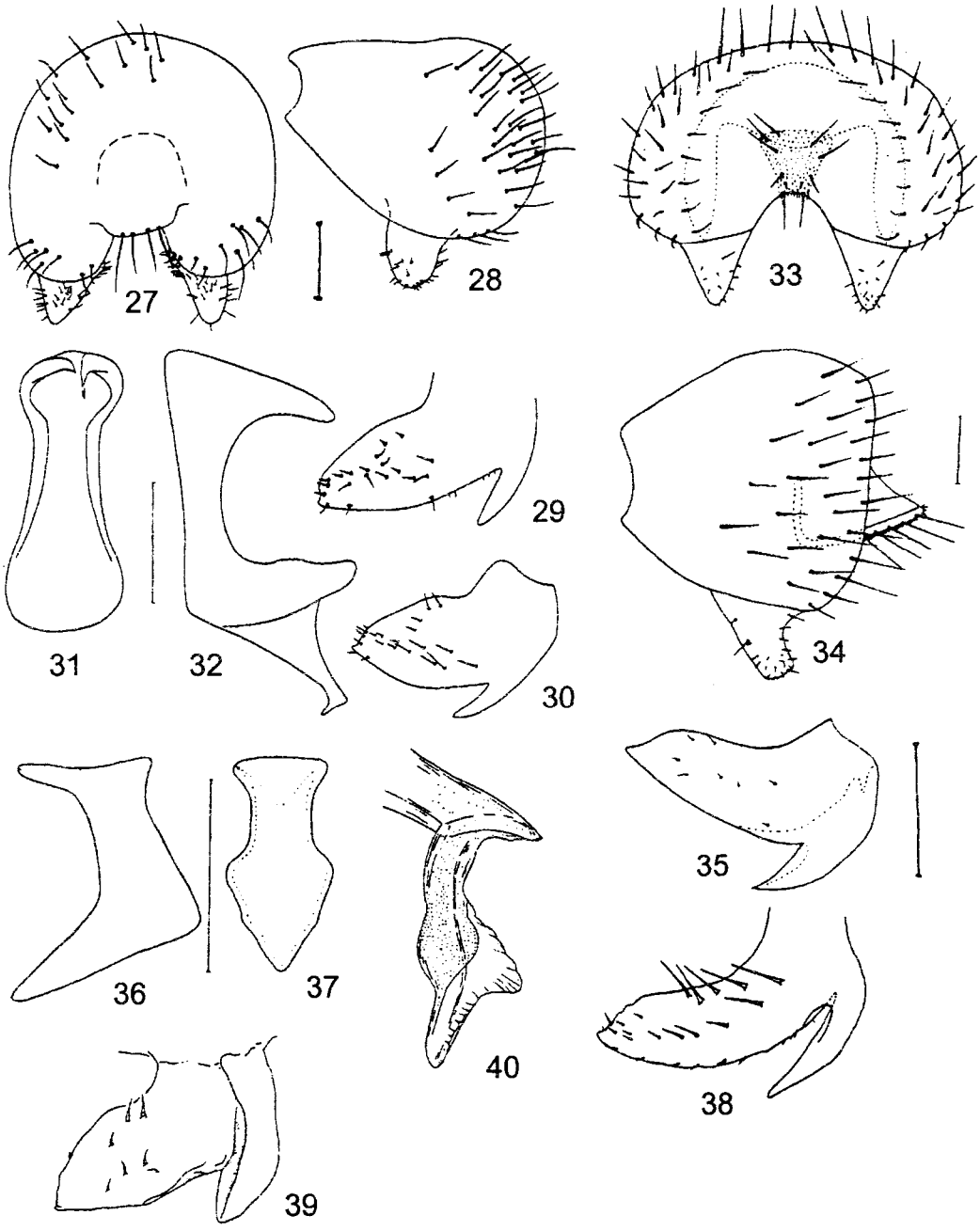

Figs 27-40. *Meromyza athletica* Fedoseeva (27-30, from Nartshuk, 1992, as *M. variegata*; 33-37, from Ismay, 1981, as *M. variegata*; 38, from Fedoseeva, 2003, as *M. variegata*; 39, 40, from Fedoseeva, 1974). **27, 35**, epandrium; 28, 34, epandrium, lateral view; **29, 30, 35, 38, 39**, postgonites, lateral view; **31, 32, 36, 37, 40**, aedeagus in different positions. Scale line: 0.1 mm.

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