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**New Species of the Genus *Meromyza* M g. (Diptera-Chloropidae)  
from Poland**

**Nowe gatunki z rodzaju *Meromyza* M g. (Diptera-Chloropidae)  
stwierdzone w Polsce**

**Новые виды рода *Meromyza* M g. (Diptera-Chloropidae),  
найденные в Польше**

*Diptera* of the genus *Meromyza* M g. (1, 2, 8, 9, 10, 11) were chiefly identified on the pattern and colour of various sections of the body while differences in the structure of sexual appendages have been disregarded.

This method raised many objections concerning the identification of many species from the genus *Meromyza* M g. and, consequently, many modern research workers (2, 13, 14) ascribed the rank of the genus only to *M. saltatrix* L., *M. pratorum* M g., and *M. variagatae* M g. which were mentioned by Meigen in the description of the genus. Other species described later were accepted as their varieties. This classification is widely used to this day.

The investigations carried out by Fiedosiejewa (3, 4, 5, 6, 7) on this group of *Diptera* showed that differences in the male parameres were most helpful in classifying separate species of the genus *Meromyza* M g. Taking into account the structure of parameres Fiedosiejewa made a revision of the genus, completed descriptions of the species known so far (she treated their varieties as independent species), and described a number of new species.

The methods used by Fiedosiejewa were applied by Peterfi (12) who described the material from the genus *Meromyza* M g.

collected in Rumania. Apart from that Peterfi described three new species. The total number of species distinguished by these methods amounts to 29.

Using the same methods of identification since 1965, I detected some new species of the *Meromyza* genus in the south of Poland. Their description is given below.

I wish to thank Miss U. Hirszfeld for assistance in collecting the material in the Kęпно county, and Mr. J. Dynowski for taking photographs.

*Meromyza eduardi* sp. n.\*

Basic colour — yellow, the length of the body 3.0—3.5 mm. The width of head equal to that of thorax. 3rd antennal segment is longer than wide; its anterior bottom part is rounded. Its top edge in the vicinity of arista is slightly concave. Antennae yellow, darkened at the top. Arista light brown, its first segment is broadened in the middle, 1.2 times longer than the next. Frons protrudes at a distance shorter or nearly equal to the width of the 3rd antennal segment. Tempora protrudes at a distance smaller than the frons. Genae are wider than the 3rd antennal segment. The angle between the tempora and genae is slightly obtuse (Fig. 1) or right. Hetae on the genae are light. Maxillary palpus is light, cylindrical in shape, nearly uniform in width, rounded at the end (Fig. 2). The hairing is light. The ocellar angle is equal-armed (Fig. 3). The length of its base is smaller than the height. The top of the ocellar angle does not reach frons. Ocellar spot within the ocellar plate is dark brown, nearly black, corrugated on its surface, or of rhomboid shape (Fig. 3). The rhomboid surface is darker than the background of the ocellar angle. With light specimens the darkening of the rhomb is hardly visible. The occiput is light with a hardly discernible pattern of two light brown dashes, reddish in colour, continuing down the ocellar angle, and two spots in the middle of the occiput stemming out as processes which meet at the base (Fig. 4). The spots and processes are clear red with brown hue. Light specimens have only markings on the occiput, dark specimens have spots which reach as far as the base of the ocellar angle, or take up the whole surface between the markings.

Thorax stout. From the dorsal side up to scutellum mesothorax is less wide than long. The length of scutellum is 1:1.2 when compared with the rest of the thorax. The margin of scutellum is rounded, the bottom surface being larger than the top terrace-like surface. At its

\* The species is named to commemorate my brother Edward who died abroad.

base scutellum is thicker than on end, its side being nearly flat. The hairing of the whole thorax is scanty and black. Hairs slightly thicker appear in the bottom part of the mesothorax and on scutellum. A light brown spot is readily visible on tuber anterioris. From dorsal side of the mesothorax run light brown longitudinal stripings. The central striping reaches  $\frac{5}{8}$  of the length of the mesothorax before scutellum (Fig. 5). In dark specimens reddish brown hue continues as far as the scutellum or outside its borderline. In light individuals central striping does not reach scutellum, and from its margin extends throughout the scutellum as a dash darker than the thorax. The two side stripings meet together in form of a reversed B letter, a black or dark brown marking at the bottom. Single ovoid, dark brown spots are visible on mesopleurae. Pteuropleurae and hypopleurae are light brown with a yellowish hue. Light brown spots and markings occur occasionally below tuber anterioris and on pleurotergum. Wings at rest cover the whole surface of abdomen or reach outside it. The vein c extends outside veins  $r_4 + r_5$  and ends at a distance of  $r_4 + r_5$  and the vein m. The halterae are light brown. Legs are yellow, the hairing is black. The tarsi of all legs have first three segments yellow, the remaining two segments and the claws are dark brown, nearly black. Posterior femora are ovoid, thickest in the middle. Their thickness when compared with that of tibiae is 3.5:1 (Fig. 6).

Abdomen from dorsal side of the first tergum has a light reddish spot on each margin. A row of light reddish dashes continues throughout the middle of all segments. Spots and dashes in dark specimens are larger and tend to occur in three rows. Anal male segment has light long bristles. Male parameres are black, strongly sclerotized (Fig. 7). Anterior parameres are stout. The ratio of height to length is 1:2. In front, their ends are short, cut off backwards to the bottom, with peak directed forwards. At the bottom anterior parameres are concave, at the back they are surrounded with posterior parameres. At side view posterior parameres, directed downwards, have form of a leaf with a stalk directed downwards (Fig. 7). At side view they seem to have blade-like form; upwards they surround anterior parameres, while their bottom protrudes freely. If the ovipositor is retracted, at the end of the female abdomen two dark cerci are distinguished whose length to width is 4:1 (Fig. 9). The female is longer than the male and at the end of July and in the beginning of August its abdomen is bulged with eggs. The fourth segment of the tarsus of the second pair of legs is lighter than the last (fifth) one. Other features in the external structure presented in this description are similar in both sexes.



## Material:

Holotype: male, 29.VII. near Rogózno, in the Lublin district, in the Łęczna and Włodawa Lake District, in a clearing with young trees planted in 1964.

Paratypes: male, 29.VII. near Rogózno, in the Lublin district, in a clearing with young trees planted in 1964.

Female, 29.VII., near Szczekanów, on the Wieprz river, in the Lublin district, in a meadow, near the bridge; 9 males + 4 females, 4.VIII. near Łęka Opatowska, on the borderline of the Łódź, Wrocław and Poznań districts, on a forest clearing grown with young pines from 1963, in the vicinity of the Prosna river; female, 6.VIII., near Łęka Opatowska, in the direction of Wieruszowo, in the Poznań district, near a coppice with mixed trees with pine prevailing, with a rich undergrowth; 2 females, 6.VIII, near Łęka Opatowska, in the Poznań district, in the vicinity of a meteorological station, near the rest-house "Ustronie", in grasses near a forest road; 1 female, 13.VIII. near Trzebienia, the Kępno county, the Poznań district, on a clearing in the neighbourhood of a tree nursery.

*Meromyza eduardi* sp. n. The specimens were caught in forest meadows (clearings, areas in pine forests where trees were cut off), in sunny places, in meadows joining farm-yards and, sometimes, by grassy forest pathways exposed to the sun.

*Meromyza eduardi* sp. n. resembles *M. rufa* Fed. However, the 3rd antennal segment of *M. rufa* Fed. is nearly square and lacks concavity near arista; its ocellar triangle is nearly equal-armed, markings on the top part of the occiput are thicker, and the side bands on mesothorax are darker not only at the bottom part. The markings surround side bands throughout the whole surface of the mesothorax. Edge bands are nearly black. Sternopleurae and hypopleurae have two-coloured spots. Tarsi of the legs have irregular darkening on the two last segments. Male anal segment has short hairs. The female cerci are shorter. The structure of the male parameres is quite different.

*Meromyza rostrata* sp. n.\*

The head shorter than wide. The 3rd antennal segment is longer than wide (Fig. 10). In front and at the bottom part it is rounded and concave near arista. Arista is two-coloured. The basal segment is lighter than the next one; their lengths are 2 : 1. Frons protrudes at a distance shorter than the width of the 3rd antennal segment, and tempora protrudes at a distance half the width of the 3rd segment.

Genae are protruding and form right or slightly obtuse angle. They are as wide as the 3rd antennal segment or slightly more so. Hairs on

\* The name comes from a beak-shaped anterior paramere of the male.

the genae are light, sometimes black in the top part. Maxillary palpus is black-haired, at the basal part cylindrical and light. In the middle it widens into a leaf-like form and is black. Observed in profile (Fig. 11) in its top part it is cut off forwards, its back being nearly flat. It is stout when compared with the other species of the *Meromyza* genus. The ocellar triangle (Fig. 12) is equal-armed, its length reaches  $3/4$  of the length of the frons. Its surface is longitudinally corrugated, brown on margins. From the top down the ocellar plate, the ridges fuse together towards the fore ocellum. The ocellar spot is nearly triangular in shape. In dark specimens it reaches the margin of the ocellar triangle in form of a dark band. The apex of the ocellar triangle is light. The colouring and pattern on the occiput are variable. In light specimens the pattern consists of two markings (Fig. 12) and two rhombs piled on each other, sometimes of two blurred spots varying in shape. In dark specimens a uniform darkening on the occiput reaches the base of the ocellar triangle or takes up the whole width of the basal part of the head.

Thorax is stout, slightly narrower than the width of the head. Mesothorax is slightly longer than wide. The length of scutellum when compared with the rest of the mesothorax is 1 : 3.5. The apical surface of scutellum is flat, terrace-like, uniform in thickness, its free edge is rounded. The length of its base is smaller than the width of the mesothorax. Dark, mostly black spots are visible on tuber anterioris. On the mesothorax there are three broad black bands of which the central one narrows towards the bottom and reaches the scutellum. Side bands have the shape of the reversed Y letter (the Y shape results from the fusion of two side bands of which the external one is short and continues throughout the bottom part of the mesothorax). In dark individuals the bands on the mesothorax are so large that the colouring of the background of the thorax is visible only in form of narrow, yellow markings. The colouring of the mesothorax is black, brown or rusty brown. The distribution of the colours of the pattern varies. Mesopleurae have wedge-shaped or ovoid solid black spots or blurred brown spots. Sternopleurae or hypopleurae are black or dark brown. Legs are yellow (Fig. 13) with tarsi of dark colour varying in intensity. Dark specimens have black, dark brown or dark yellow stains on different parts of the legs. The femora of the 3rd pair of the legs are three times thicker than tibiae and are uniform in thickness throughout the whole length. Wings are longer than the thorax. Vein c extends outside veins  $r_4 + r_5$  and ends at  $1/8$  distance of  $r_4 + r_5$  and m. Halterae are milky-white.

Abdomen has the tergums often dark-stained all over its width. The basic colour is visible only on top margins of the segments. Light specimens

have a row of longitudinal dark dashes in the middle of all tergums with 2 spots on margins of the first segment, and two longitudinal rows of side spots less discernible. Anal segment of the male has light bristles. The male parameres are black with thin narrow ends visible outwardly. The anterior parameres are beak-shaped (Fig. 14); in the middle they are rolled up, with a gutter-like indentation, and are terminated with a tooth directed upwards. The anterior male parameres are not so strongly sclerotized in the apical part and have ends freely protruding sideways in form of two beak-shaped lobes (Fig. 15). In the basal part these parameres are concave. Posterior parameres are wedge-shaped, rounded at the apex, with one half of their length they join the back part of the anterior parameres, with the second half they are directed longitudinally downwards, when compared with the anterior parameres. They are wider at the apex than in the basal part. The female cerci are short and wide, their length to width ratio being 2 : 1 (Fig. 16). In June and August the abdomen of the female is filled up with eggs. The female is longer than the male. Yellow is the basic colour in both sexes. The body length is 3—4 mm.

Material:

Holotype: 1 male, 16.VI.1965, Osiny near Puławy. Experimental Station JOR, on winter wheat „Ostka Popularna”.

Paratypes: 1 male, 2.VI.1964, Majdanek near Lublin, in meadow. 1 male and 1 female, 16.VI.1965, Osiny near Puławy, Experimental Station JOR, on winter wheat „Wysoka Litewka”. One male, 13.VII.1965, near Rogóžno, the Lublin district, on grassy pathways near a forest clearing; 1 male, 5.VIII.1965, Sławinek near Lublin, a meadow near river; 1 female, 10.VIII.1965, Sławinek near Lublin, a meadow near river; 1 male and 2 females, 14.VIII.1965, Kęblów near Piaski, the Lublin district, ditches by the road; 2 males and 3 females, 17.VIII.1965, Wierzchowiska near Piaski, the Lublin district, ditches and banks by roads; 1 female, 21.VIII.1965, Morskie Oko near Zakopane, on the pathway near the lake; 1 female, 22.VIII.1965, Nadeżów, the county of Tomaszów Lubelski, the Lublin district, a meadow near a farm-yard; 1 male and 1 female, 29.V.1964, Wrotków near Lublin, a meadow on the river; 1 male, 16.VI.1965, Osiny near Puławy, Experimental Station JOR, on winter wheat „Ostka Popularna”; 2 males, 28.VI.1965, Osiny near Puławy — Experimental Station JOR, on winter wheat „Wysoka Litewka”.

*Meromyza rostrata* sp. n. Specimens of this species were caught in pasture meadows, in ditches and on banks, by roads, by grassy pathways near forest clearings, in meadows, by pathways near the lake and on plantings of winter wheat.



The colouring of dark specimens of *M. rostrata* sp. n. is very similar to that of the spring form of *M. nigriventris* M a c q. In light specimens the colouring is as described above but the parameres are quite different. The differences between these two species concerning the other items in the structure of the body are as follows: the 3rd antennal segment in *M. nigriventris* is shorter. Maxillary palpus is smaller, the angle between the genae and tempora is obtuse, the ocellar angle is shorter in height and corrugated in various directions, the mesothorax is nearly square, the femora of the last pair of legs are thicker and more ovoid.

*Meromyza rostrata* sp. n. is similar to *M. sibirica* F e d, with regard to the general proportions of the body. Anterior parameres in both species are rolled up and terminated with the proboscis. In *Meromyza sibirica* posterior femora are nearly four times thicker than the tibiae, scutellum is light with a pattern lacking band in the middle, different anterior parameres in their basal part and posterior parameres. A brief comparison of similarities and differences of both species shows that *M. rostrata* sp. n. is more related to *M. sibirica* F e d than *M. nigriventris* M a c q. is.

*Merozoma rotundata* sp. n.\*

Head is slightly wider than thorax, its length being smaller than the width. The 3rd antennal segment in width is equal to length, rounded in the frontal and basal parts (Fig. 17). Darkened in the apical part, its basic colour is yellow. Arista is of one colour. The first noticeable segment is 1.5 times longer than the next to it. Arista is brown. Frons protrudes at a distance nearly equal to the width of the 3rd antennal segment. Tempora are narrower and genae are wider or equal to the width of the 3rd antennal segment. The angle between genae and tempora is obtuse. Hairs on the genae are light. Maxillary palpus is light at the cylindrical base; from the middle it is widened and black. The hairing of the maxillary palpus is black (Fig. 18). The ocellar angle is elongated, its apex nearly reaches the arcuate suture, its surface is corrugated. The ocellar spot is nearly round, and extends over the border-line of the ocellar plate (Fig. 19); sometimes it reaches the margins of the ocellar triangle and has the shape of a black band. The occiput has variable pattern in the middle. The drawing of the pattern is an agglomeration of triangles piled on one another and reaching the ocellar spot. The occiput in dark specimens is black on the whole surface and joins a dark band on the ocellar triangle. Frons is yellow even in dark specimens.

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\* The name of the species comes from the posterior parameres being rolled up and rounded.

Thorax. Thorax from the dorsal side is slightly convex. Mesothorax is rectangular in shape, nearly square (up to scutellum). The length of scutellum when compared with the rest of the mesothorax is 1:2.5. The top surface of scutellum is slightly convex. Dark specimens have three broad bands on the mesothorax which are separated by narrow markings of the yellow background. The central broad band extends over scutellum which may be black all over its surface. Light specimens have short narrow bands which join side inward bands. All of them are arranged like an Y letter with the upper part underneath. Their colour is black and brown, brown and rusty brown, and brown and yellow. Each tuber anterioris has one black or brown spot. Mesopleurae have brown or black spots. Pteropleurae and hypopleurae are black or two-coloured. Pteropleurae have dark wedge-shaped spots or markings. Wings are longer than the abdomen. Vein c stops short just after the veins  $r_4 + 5$ . Halteres are light. Legs are yellow with black hairing (Fig. 20). Dark specimens are dark-spotted with strong dark colouration of the tarsi. Femora of the 3rd pair of legs are ovoid and three times thicker than tibiae.

Abdomen. Abdomen from the dorsal side has dark transverse bands on each tergum, sometimes taking up the whole surface of the tergum. In dark specimens the abdomen viewed from the top seems to be black. In light specimens the transverse bands on the abdomen are light brown, and the pattern consisting of longitudinal, dark markings running through the middle of the abdomen is more distinct. The anal male segment is bordered with light hairs. The male parameres are small when compared with the other species of the *Meromyza* genus. Anterior parameres are strongly sclerotized. Posterior parameres are more sclerotized in their basal part and are getting thinner downwards (Fig. 21). Their colour is brown. In outline the anterior paramere resembles a foot with a high instep. Its free border is gutter-like, thinning at the end and terminated with a single tooth. Posterior parameres are curved wasp-like downwards with a tooth. Their basal part is fringed. Cerci of the female ovipositor is short and thick. The ratio of their length to width is 5:3. The basic colour in both sexes is yellow. The length of the body is 3.0—3.5.

#### Material:

Holotype: 3 females, 29.V.1964 in Wrotków near Lublin, in a meadow near river; 1 male, 16.VI.1965 in Osiny near Puławy, Experimental Station JOR, on winter wheat „Ostka Popularna”; 1 male, 29.VII.1965 near Sosnowice, the Lublin district, a non-arable area in the forest situated in the direction of the reserve on the Czarne Lake.

*Meromyza rotundata* sp. n. The specimens of this species were caught in near-by river meadows, fallows, and on winter wheat.



*Meromyza rotundata* sp. n. resembles *M. nigriventris* Macq. by the colouring and shape of the anterior parameres. Other features distinguishing it from *Meromyza rotundata* are as follows: one-coloured arista, a more protruding frons, broader genae, a larger and higher ocellar triangle, thorax more flat, and quite different posterior male parameres which slightly resemble a posterior parameres of *M. hybrida* Pé t., which are thinner than those of *M. nigriventris* Macq., have even borders and are curved downwards. They are much longer than those in *M. hybrida* Pé t., more wedge-shaped with an arch-like curve. The anterior parameres of *M. rotundata* sp. n. and *M. hybrida* Pé t. are quite different, the other differences concerning the structure of the head and thorax. The features by which *M. rotundata* sp. n. differ and resemble the corresponding features in *M. nigriventris* Macq. and *M. hybrida* Pé t. suggest that *M. rotundata* sp. n. ought to be ranked between *M. nigriventris* Macq. and *M. hybrida* Pé t. suggest that *M. rotundata* sp. n. ought to be ranked between *M. nigriventris* Macq. and *M. hybrida* Pé t.

The holotypes of the species described above will be placed in the Museum of the Zoological Institute of the Polish Academy of Sciences in Warsaw, and the paratypes will remain in the author's collection.

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## EXPLANATION OF FIGURES

- Fig. 1. *Meromyza eduardi* sp. n. — the angle between tempora and genae.
- Fig. 2. *Meromyza eduardi* sp. n. — palpus maxillaris.
- Fig. 3. *Meromyza eduardi* sp. n. — ocellar triangle.
- Fig. 4. *Meromyza eduardi* sp. n. — occiput.
- Fig. 5. *Meromyza eduardi* sp. n. — mesonotum.
- Fig. 6. *Meromyza eduardi* sp. n. — 3rd pair of legs.
- Fig. 7. *Meromyza eduardi* sp. n. — male parameres (side view).
- Fig. 8. *Meromyza eduardi* sp. n. — male parameres (oblique view).
- Fig. 9. *Meromyza eduardi* sp. n. — female cerci.
- Fig. 10. *Meromyza rostrata* sp. n. — 3rd antennal segment.
- Fig. 11. *Meromyza rostrata* sp. n. — palpus maxillaris.
- Fig. 12. *Meromyza rostrata* sp. n. — ocellar triangle.
- Fig. 13. *Meromyza rostrata* sp. n. — 3rd pair of legs.
- Fig. 14. *Meromyza rostrata* sp. n. — male parameres (side view).
- Fig. 15. *Meromyza rostrata* sp. n. — male parameres (oblique view from the bottom).
- Fig. 16. *Meromyza rostrata* sp. n. — female cerci.
- Fig. 17. *Meromyza rotundata* sp. n. — 3rd antennal segment.
- Fig. 18. *Meromyza rotundata* sp. n. — palpus maxillaris.
- Fig. 19. *Meromyza rotundata* sp. n. — ocellar triangle.
- Fig. 20. *Meromyza rotundata* sp. n. — ocellar triangle.
- Fig. 21. *Meromyza rotundata* sp. n. — male parameres.

## STRESZCZENIE

Biorąc pod uwagę budowę przysadek płciowych muchówek podano opis trzech nie notowanych gatunków z rodzaju *Meromyza* Mg.: *M. eduardi*, *M. rostrata* i *M. rotundata*. Materiał zbierano w środowiskach bogatych w trawy z różnych okolic południowych terenów Polski.

*Meromyza eduardi* sp. n. łowiono na łąkach leśnych (polanach, starych porębach wśród lasów sosnowych) w miejscach nasłonecznionych, na łąkach przypodwórzowych, a czasem przy gęsto porośniętych trawami ścieżkach leśnych o dużym naświetleniu. *Meromyza rostrata* sp. n. zbierano na wypasanych łąkach przyrzecznych, w rowach i na skarpach przy szosach oraz na trawach przy ścieżkach koło polan leśnych, łąkach śródpolnych, przy ścieżkach koło jeziora i nad ozimą pszenicą, zaś *Meromyza rotundata* sp. n. na łąkach przydrożnych, ugorach i ozimej pszenicy.

Opisane gatunki różnią się budową paramer samców od innych muchówek z rodzaju *Meromyza* M g., a bliższe podobieństwa innych cech wykazują do niektórych z nich.

*Meromyza eduardi* sp. n. podobna jest do *M. rufa* F e d., lecz *M. rufa* F e d. ma trzeci człon czułka prawie kwadratowy i od góry bez wklęsnięcia przy aristrze; trójkąt przyoczkowy prawie równoboczny; krezki na potylicy w górnej części są rozszerzone; na śródtułowi paski boczne zaciernione nie tylko w dolnej części, ale obrzeżają paski boczne na całej długości i zewnętrzne paski boczne są prawie całe czarne; na sterno- i hypopleurach znajdują się plamy dwukolorowe; stopy nóg mają regularne zaciemnienia dwu ostatnich członów; analny segment samca posiada krótkie owłosienie, a samicy krótsze cerci.

Ubarwienie ciemnych egzemplarzy *M. rostrata* sp. n. jest ładząco podobne do ubarwienia wiosennej formy *M. nigriventris* M a c q., zaś okazów jaśniejszych — do wiosennej formy tego gatunku. Różnice między tymi gatunkami dostrzega się i w innych szczegółach budowy, a mianowicie: *M. nigriventris* M a c q. trzeci człon czułek ma krótszy, głaszczki drobniejsze, kąt policzkowo-skroniowy rozwart, trójkąt przyoczkowy posiada niższą wysokość i pofałdowany jest w różnych kierunkach, śródtułów prawie kwadratowy, uda ostatniej pary grubsze i bardziej jajowate.

*Meromyza rostrata* sp. n. podobna jest też do *M. sibirica* F e d. w ogólnych proporcjach ciała oraz przednie paramery obu gatunków mają podobnie w trąbkę wyciągniętą końcową część, ale u *M. sibirica* F e d. uda trzeciej pary nóg są do czterech razy grubsze od ich goleni; jasna tarczka pozbawiona jest rysunku paska po środku. Zestawiając podobieństwa i różnice wymienionych gatunków można sądzić, iż *M. rostrata* sp. n. jest bliższy *M. sibirica* F e d. niż *M. nigriventris* M a c q.

*Meromyza rotundata* sp. n. ubarwieniem i kształtem przednich paramer jest podobna do *M. nigriventris* M a c q., lecz ma jednokolorową aristę, bardziej wystające czoło, szersze policzki, większy i wyższy trójkąt przyoczkowy, bardziej płaski tułów i zupełnie inne tylne paramery samca. Te ostatnie przypominają nieco tylne paramery samca *M. hybrida* P é t., które też są cieńsze od przednich, brzegi mają nie wygładzone i podwijają się w dół do przednich, ale u *M. hybrida* P é t. są one znacznie dłuższe, bardziej łopatomate i wygięcie mają łukowate, a nie esowate. Przednie paramery *M. rotundata* sp. n. i *M. hybrida* P é t. są zupełnie inne; wyraźne także różnice między tymi gatunkami zaznaczają się w budowie głowy i tułowia. Podobieństwa i różnice wymienionych gatunków nasuwają przypuszczenie, że *M. rotundata* sp. n. powinna znajdować się w szeregu gatunków między *M. nigriventris* M a c q. i *M. hybrida* P é t.



## OBJAŚNIENIA RYCIN

- Ryc. 1. *Meromyza eduardi* sp. n. — kąć policzkowo-skroniowy.  
 Ryc. 2. *Meromyza eduardi* sp. n. — głaszczek (*palpus maxillaris*).  
 Ryc. 3. *Meromyza eduardi* sp. n. — trójkąt ocellarny (*a triangular of ocelli*).  
 Ryc. 4. *Meromyza eduardi* sp. n. — potylicca (*occiput*).  
 Ryc. 5. *Meromyza eduardi* sp. n. — śródplecze (*mesonotum*).  
 Ryc. 6. *Meromyza eduardi* sp. n. — odnóże III pary (III pair of legs).  
 Ryc. 7. *Meromyza eduardi* sp. n. — paramery samca z profilu.  
 Ryc. 8. *Meromyza eduardi* sp. n. — paramery samca na ukos.  
 Ryc. 9. *Meromyza eduardi* sp. n. — cerci samicy.  
 Ryc. 10. *Meromyza rostrata* sp. n. — trzeci człon czułka.  
 Ryc. 11. *Meromyza rostrata* sp. n. — głaszczek.  
 Ryc. 12. *Meromyza rostrata* sp. n. — trójkąt przyoczkowy.  
 Ryc. 13. *Meromyza rostrata* sp. n. — odnóże III pary.  
 Ryc. 14. *Meromyza rostrata* sp. n. — paramery samca z profilu.  
 Ryc. 15. *Meromyza rostrata* sp. n. — paramery samca na ukos od dołu.  
 Ryc. 16. *Meromyza rostrata* sp. n. — cerci samicy.  
 Ryc. 17. *Meromyza rotundata* sp. n. — trzeci człon czułka.  
 Ryc. 18. *Meromyza rotundata* sp. n. — głaszczek.  
 Ryc. 19. *Meromyza rotundata* sp. n. — trójkąt przyoczkowy.  
 Ryc. 20. *Meromyza rotundata* sp. n. — odnóże III pary.  
 Ryc. 21. *Meromyza rotundata* sp. n. — paramery samca.

## РЕЗЮМЕ

Принимая во внимание строение половых придатков двукрылых, автор описывает три до сих пор не обнаруженные виды рода *Meromyza* M g: *M. eduardi*, *M. rostrata*, *M. rotundata*. Материал соби-рался в районах покрытых травянистой растительностью на юге Польши.

*Meromyza eduardi* sp. n. автором собран на лесных лугах (полянах, старых лесорубках в сосновых лесах) хорошо освещенных, на лугах прилегающих к хозяйственным постройкам, а иногда также и около освещенных лесных тропинок, поросших густой травянистой растительностью. Вид *Meromyza rostrata* sp. n. обитает на пастбищных лугах около рек, во рвах и на склонах обочин шоссе-ных дорог, на травах лесных тропинок, в особенности около лесных полян, на лугах, находящихся среди пахотной земли, на приозерных тропинках, а также вблизи полей озимой пшеницы. Вид *Meromyza rotundata* sp. n. найден на придорожных лугах, на парах и на полях озимой пшеницы.

Описанные виды отличаются строением параметров гипопигия самцов от других видов рода *Meromyza* M g. Что же касается других

признаков, то эти виды напоминают некоторые известные виды *Meromyza* M g.

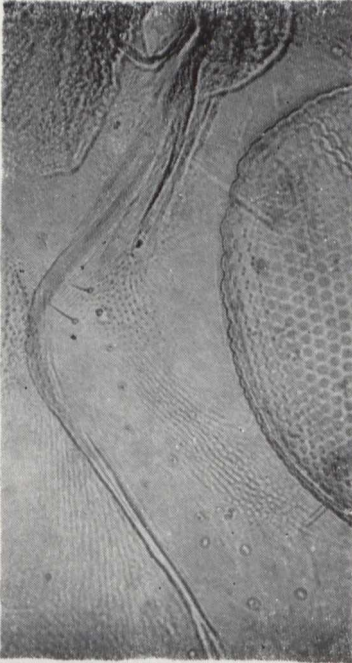
Вид *Meromyza eduardi* sp. n. сходен с *M. rufa* Fed., однако третий член усиков у *M. rufa* Fed. имеет почти квадратную форму и в верхней части у него вблизи аристы отсутствует углубление. Оцелярный треугольник почти равнобокий, штрихи на затылке в верхней части расширены; на среднеспинке боковые полосы черно окрашены не только в их нижней части, но они затемнены по всей длине; внешние боковые полосы почти целые черного цвета; на стерно и гипоплеурах имеются двухцветные пятна; два последние члены лапок характеризуются неравномерным темным оттенком; на анальном сегменте самца *M. rufa* Fed. имеются более короткие волоски; а у самки церци короче чем у самки *M. eduardi* sp. n.

Окраска темных особей *M. rostrata* sp. n. очень похожа на окраску весенней формы *M. nigri-ventris* Masq., а особи светлые напоминают летнюю форму *M. nigri-ventris* Masq. Различия между этими видами имеются и относительно других черт, а именно: у *M. nigri-ventris* Masq. третий членик антенны более короткий; щупики более мелкие, угол между скулами и щеками тупой, оцелярный треугольник характеризуется меньшей высотой, причем у него имеются нерегулярные морщины, среднеспинка почти квадратной формы; бедра последней пары ног более толстые и яйцевидные. Вид *Meromyza rostrata* sp. n. похож тоже на *M. sibirica* Fed. относительно общих пропорций тела, причем передние парамеры гипопигия обоих видов удлинены в трубку. Бедра третьей пары ног у *M. sibirica* Fed. четырехкратно превосходят толщину их голеней; щиток светлый и на нем никогда не наблюдаются полосы. Таким образом в итоге сопоставления признаков сходных и различных у этих видов, автор предполагает, что вид *M. rostrata* sp. n. может быть более близок виду *M. sibirica* Fed. чем *M. nigri-ventris* Masq.

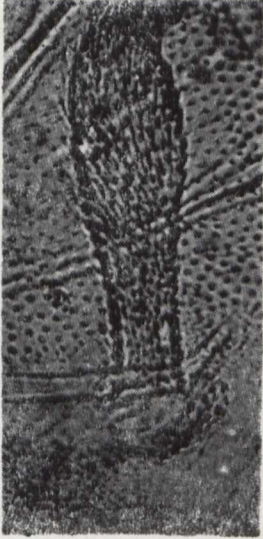
Вид *Meromyza rotundata* sp. n. окраской тела и формой передних парамеров гипопигия сходен с *M. nigri-ventris* Masq. Однако он отличается от последнего одноцветной аристой, более выпуклым лбом, более широкими щеками, большим и высшим оцелярным треугольником, более плоской среднеспинкой и совершенно различными задними парамерами гипопигия у самцов. Эти парамеры напоминают немного задние парамеры у самцов *M. hybrida* Pét. так как они более тонки по сравнению с передними, края у них не гладкие и подвернутые в переднем направлении. Однако задние парамеры самца *M. hybrida* Pét. более длинны, у них лопаточная форма, причем они дугообразно изогнуты. Передние парамеры *M. rotundata* sp. n.

и *M. hybrida* Pét. совершенно различны. По строению головы и туловища эти два вида тоже существенно различаются. Сходства и различия упомянутых видов выдвигают предположение о том, что вид *M. rotundata* sp. n. должен быть отнесен к ряду промежуточных видов между *M. nigriventris* Mascq. и *M. hybrida* Pét.





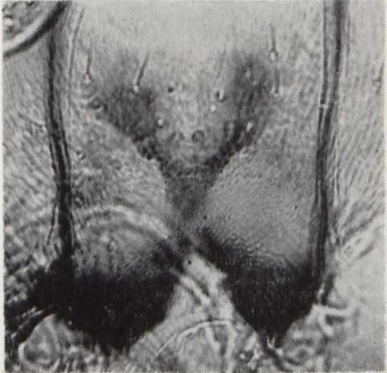
Ryc. 1



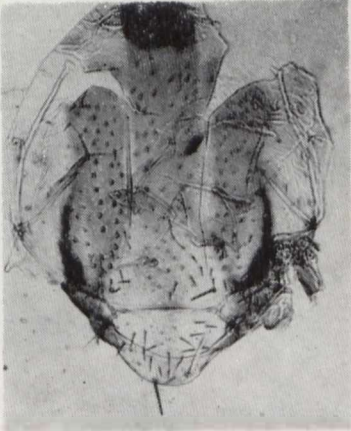
Ryc. 2



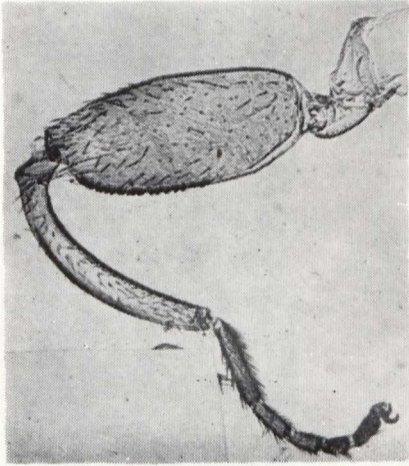
Ryc. 3



Ryc. 4



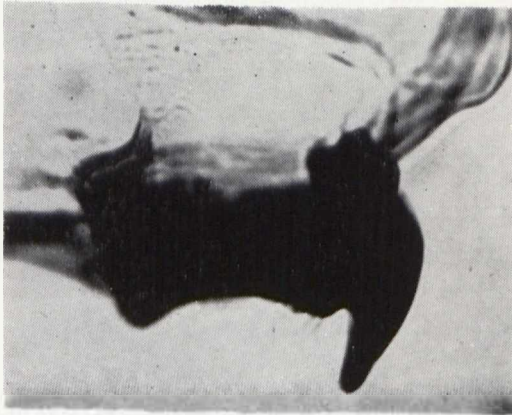
Ryc. 5



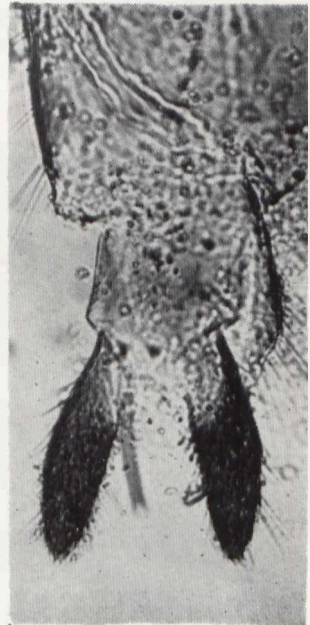
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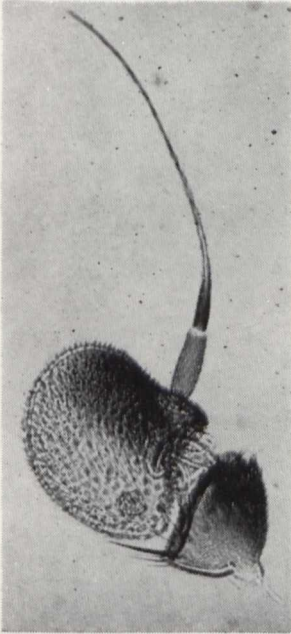
Ryc. 7



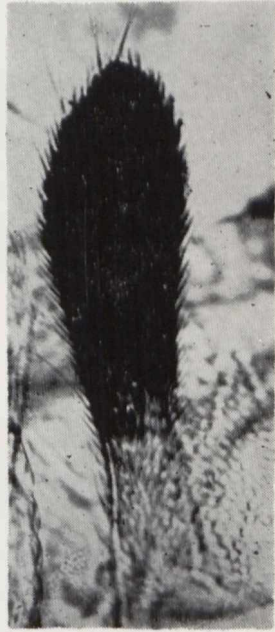
Ryc. 8



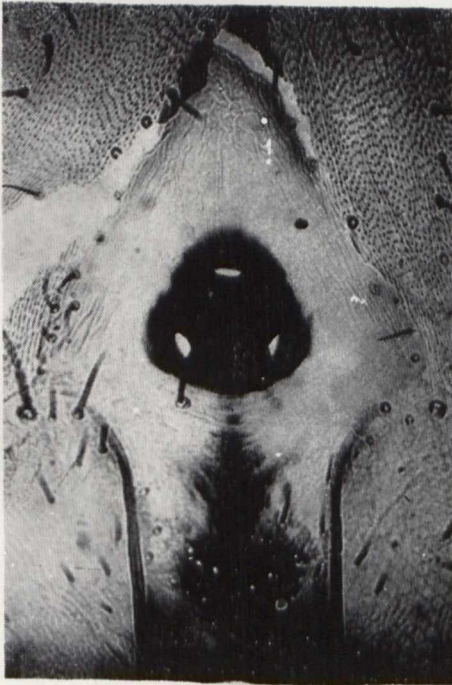
Ryc. 9



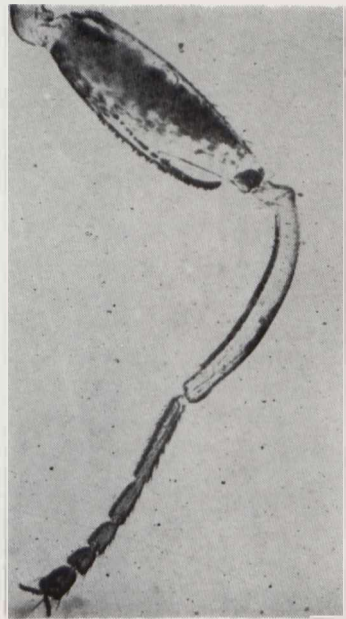
Ryc. 10



Ryc. 11

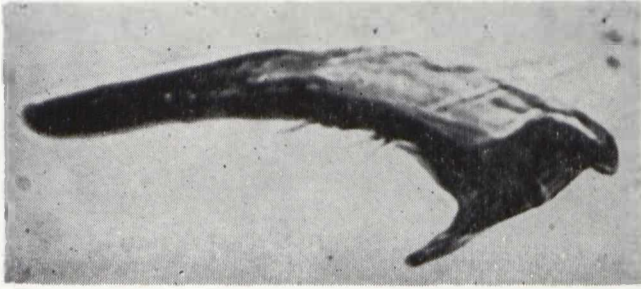


Ryc. 12

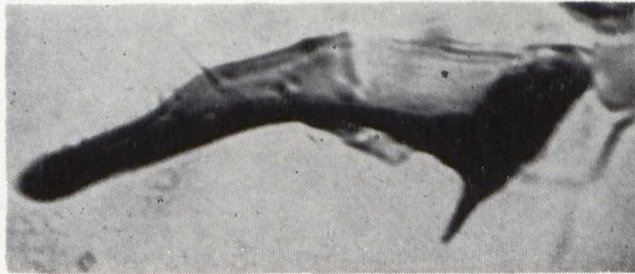


Ryc. 13

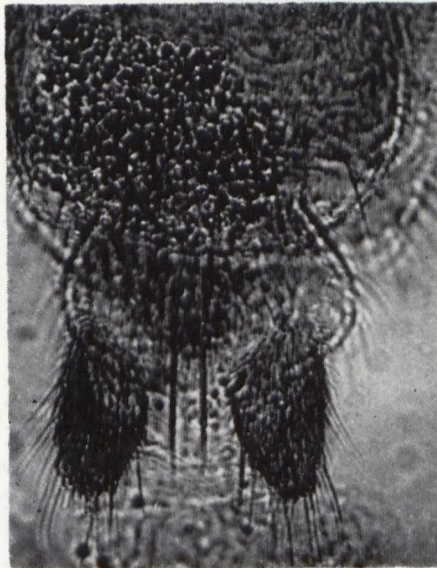




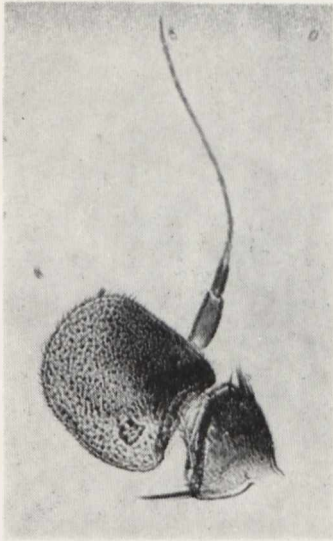
Ryc. 14



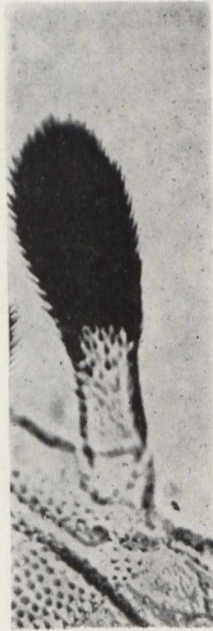
Ryc. 15



Ryc. 16



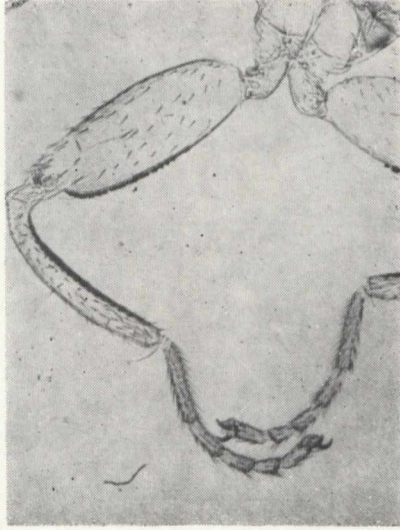
Ryc. 17



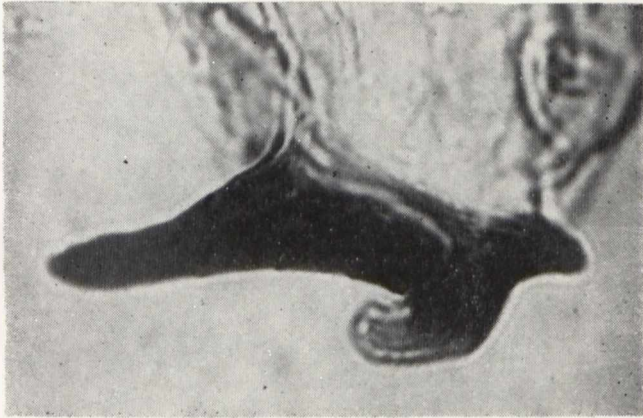
Ryc. 18



Ryc. 19



Ryc. 20



Ryc. 21