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**Caddis-flies (*Trichoptera*) in the collection of the Institute of Systematic and Experimental Zoology, Polish Academy of Sciences in Cracow**

[With 21 text-figs.]

**Chruściki (*Trichoptera*) w kolekcji Zakładu Zoologii Systematycznej i Doświadczalnej, Polskiej Akademii Nauk w Krakowie**

**Abstract:** The collection of caddis-flies (*Trichoptera*), belonging to the Institute of Systematic and Experimental Zoology, Polish Academy of Sciences in Cracow is described. It includes about 1300 specimens representing 166 species collected and identified by J. DZIĘDZIELEWICZ, and about 220 specimens (unidentified up to the now) representing 72 caddis-fly-species collected by other collectors (among other by A. WAGA more than 120 years ago).

The collection comprises of all the species described by DZIĘDZIELEWICZ; the lectotypes of the following are designated: *Potamophylax carpathicus* (Dz.), *Acrophylax vernalis* Dz., *Isogamus czarnohorensis* (Dz.), *Chaetopteryx polonica* Dz. and *Annitella chomiacensis* (Dz.). *I. czarnohorensis*, which was given the rank of species is redescribed and illustrated.

New species (*Hydropsyche bulgaromanorum* MAL. and *Triaenodes simulans* TJED.) for the Polish fauna were found.

A list of incorrect identifications by DZIĘDZIELEWICZ is presented.

INTRODUCTION

In 1976 my investigations into the caddis-flies of the Western Carpathians were hampered by the difficulty of identifying many species in the imago stage, caused partly by geographical variation. This resulted in the necessity to conduct comparative studies on the wide systematic range of species distributed along the Carpathian range or appearing in neighbouring mountain ranges in Central Europe. I found the collections of the Institute of Systematic and Experimental Zoology, Polish Academy of Sciences in Cracow, to be of great help.

It appeared however that many of the specimens stored here were unidentified or identified incorrectly, and much of the labelling was obsolete nomenclature. Since most of the material came from the areas studied by myself

in the Carpathians, it was necessary to verify \* identify and order the collections. I finished this work by the beginning of 1978.

The total collections was comprised of about 1500 specimens, all in dried state, dating back just over a hundred years. The first entry in the inventory of the collection is from the year 1876 and gives specimens from the order *Neuroptera* (in former significance, as now the part of the *Neuroptera* has been divided into 6 different orders, one of which is *Trichoptera*); among them are caddis-flies acquired by M. ŁOMNICKI, A. WIERZEJSKI and T. ŻEBRAWSKI, identified by J. DZIĘDZIELEWICZ. These collectors augmented the collection of caddis-flies over the next 5 years. The identification carried out by the collectors, was probably verified by DZIĘDZIELEWICZ. The entries in the inventory show, that, beginning from the year 1882, the collection grew mainly through material collected and identified by DZIĘDZIELEWICZ. The entries become intermittent by 1893, however the last caddis-fly specimen was obtained by DZIĘDZIELEWICZ with the exact date and place on 4. II. 1912.

In 1901, and probably in the following years as well, the collection of caddis-flies was increased with material collected by F. SCHILLE which were identified by DZIĘDZIELEWICZ.

Besides the specimens described in the inventory there are several which do not have reference in the inventory. Most of these come from the collections of Antoni WAGA, bought by PAU after his death in the 1894. The group of caddis-flies which have been carefully prepared on strips of mica are the oldest. Although none of them has a date of capture, it is easy to establish on the basis of the place of capture that most of the specimens were collected during the middle of the last century, during which time WAGA made many trips to Złoty Potok, in 1854 to Ojców, in June 1860 to Szczawnica (TACZANOWSKI, 1964). It may be assumed from the style of writing on the labels that some of these specimens were identified by K. JELSKI.

A few specimens which are also not entered into the inventory were collected by K. JELSKI in the years 1882—1885, by S. KAMIENIECKI at an uncertain date which were given to PAU after the death of the collector by his wife in 1913, and by J. FUDAKOWSKI between the 1920's and 1950's.

The greater part of caddis-flies in the old collection were collected from the Eastern Carpathians in the high Prut region (Czarnohora, Gorgany), from the Carpathian foot-hills in the district of Kołomyja and Stryj, from the southern part of Roztocze in the district Lvov, from Gólgóry by DZIĘDZIELEWICZ and partly by ŁOMNICKI, as well as the Podole Uplands by KAMIENIECKI. These regions are now part of the USSR.

A smaller portion of the caddis-flies were collected from the Western Carpathians, thus: DZIĘDZIELEWICZ and WIERZEJSKI collected from the Tatras,

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\*A number of specimens identified by DZIĘDZIELEWICZ were verified earlier by K. H. FORSSLUND (some specimens of *Apatania*) and C. TOMASZEWSKI. The latter author verified mainly the identifications of specimens coming from the present territory of Poland; he took the verifications into considerations in his paper (TOMASZEWSKI 1965).



SCHILLE from the Sądecki Beskid in the region of Rytro, WAGA from the Pieńiny at Szczawnica and from the Middle Beskid at Sucha, DZIĘDZIELEWICZ from the Babia Góra Mtn and vicinity of Myślenice, and finally WIERZEJSKI collected from along the river Skawa.

A few specimens were collected from the Cracow — Częstochowa Uplands, mainly from the sites Złoty Potok, Ojców and Krzeszowice by WAGA.

Several specimens were collected from the vicinity of Cracow by ŻEBRAWSKI, JEŃSKI and FUDAKOWSKI. A similar small number from the Mazovian-Podlaska Lowlands, mainly in the vicinity of Warsaw and near Grabowo (Kolno Upland) were collected by WAGA.

There are also occasional specimens of caddis-flies from Western Europe collected by WAGA.

The collection of caddis-flies at the Institute of Systematic and Experimental Zoology, PAS in Cracow owes its existence mainly to the amateur entomologist J. DZIĘDZIELEWICZ. He collected and identified the majority of specimens and gave the collection its present form.

Józef DZIĘDZIELEWICZ was trained as a lawyer (ŁOMNICKI, 1920). He was born in Lvov on 4. XI. 1844. There he finished his studies at the university and in 1871 took up work in the judiciary. His work took him to various places in the Ukrainian foothills of the Carpathians, and he had the opportunity to gather a collection of *Neuroptera* from an area which had not hitherto been explored by entomologists. The collection of insects, started in the year 1865, later became his passion, and after his retirement in 1907 he devoted all his time to his hobby.

He was a member of the Physiographical Commission of the Cracow Science Society. He cooperated closely with the DZIĘDUSZYCKI Museum in Lvov (now the Gosudarstviennyj prirodozvedčeskij muzej Akademi Nauk USSR), where he corrected and added to their collection of *Neuroptera*. The outbreak of the First World War forced him to leave Lvov and move to Myślenice (30 km south of Cracow) where he died on 24. II. 1918.

DZIĘDZIELEWICZ contributed a substantial amount to the knowledge of caddis-flies, primarily of the Carpathians; he discovered 7 new species. He was the first to give a detailed scientific literature of the caddis-flies then existing in Poland, with a full list of species and informations about them.

#### SPECIES LIST

To avoid continually repeating the names of geographical regions the following abbreviations have been employed: R — Roztocze (Lubelskie, Lubelsko-Lwowskie, Lwowskie), PU — Podolska Uplands (with Gologóry), CF — Carpathian foothills (only in the Dniestr and Prut basins), EC — Eastern Carpathians, WC — Western Carpathians, CCU — Cracow — Częstochowa Uplands, MPL — Mazovian-Podlaska Lowlands. More accurate descriptions of the place of cap-

ture are given when referring to: rare species, important from the taxonomic or zoogeographical point of view, as well as those specimens which DZIĘDZIELEWICZ identified wrongly and which were recorded under the wrong name in the inventory book of the collection. This has to be done to enable reference to the scientific literature and thus corrections to be made.

Place names are given in the original notation as they appear in the documents of the collections.

The taxonomy and the nomenclature according to *Limnofauna Europaea* (BOTOSANEANU, MALICKY, 1978).

#### A. DZIĘDZIELEWICZ's collection (specimens registered in the inventory book of the collections)

##### *Rhyacophilidae*

*Rhyacophila fasciata* HАГ., 26 ♂♂, 3 ♀♀; EC, CF, WC; most specimens bore the labels with the name "*R. septentrionis* MCL.", 1 ♀ from the Eastern Carpathians (Dora?) was wrongly identified as "*R. intermedia* MCL.".

*R. flava* KLAP., 2 ♂♂; EC (Czarnohora, Breskul 11. IX. 1909); specimens were noted under the synonym "*R. furcata* Dz".

*R. laevis slovenica* SYKORA, 4 ♂♂; EC.

*R. mocsaryi* KLAP., 5 ♂♂, 1 ♀; EC, Tatras; specimens from the Tatras were wrongly labelled as "*R. torrentium* PICT.".

*R. nubila* (ZETT.), 25 ♂♂, 8 ♀♀; EC, WC.

*R. obliterated* MCL., 14 ♂♂, 2 ♀♀; EC.

*R. philopotamoides orentis* SCHMID, 14 ♂♂, 4 ♀♀; EC; specimens caught on the slopes of Waratek and at Dora were wrongly labelled as: "*R. hirticornis* MCL." or "*R. intermedia* MCL.?".

*R. polonica* MCL., 19 ♂♂, 4 ♀♀; EC; some specimens (e. g. from the Tatras) were noted under the synonym "*R. hageni* MCL.".

*R. tristis* PICT., 11 ♂♂, 11 ♀♀; EC, WC.

*R. vulgaris* PICT., 7 ♂♂, 5 ♀♀; Tatras; 1 ♀ was wrongly labelled as "*R. torrentium* PICT.".

##### *Glossosomatidae*

*Glossosoma boltoni* CURT., 3 ♂♂, 2 ♀♀; EC (Mikuliczyn on the river Prut), WC (Rytro on the river Poprad); imagines from the vicinity of Rytro are undoubtedly conclusive evidence of the appearance of this species in Poland. It has been given earlier as a species from the Polish Tatras (RIEDEL, 1962). The male and female genitalia are presented in figures 1 and 2.

DZIĘDZIELEWICZ did not differentiate between the species *G. boltoni* CURT. (known then as *G. vernalis* PICT.) and *G. conformis* NEBOISS (known then as *G. boltoni* MCL.), since all the specimens from this genus were identified by him as *G. boltoni* CURT. (sensu MCL.) that is *G. conformis*.

*G. conformis* NEBOISS, 2 ♂♂, 4 ♀♀; WC (Tatras, Babia Góra); all specimens bore the labels with the name "*G. boltoni* CURT.".

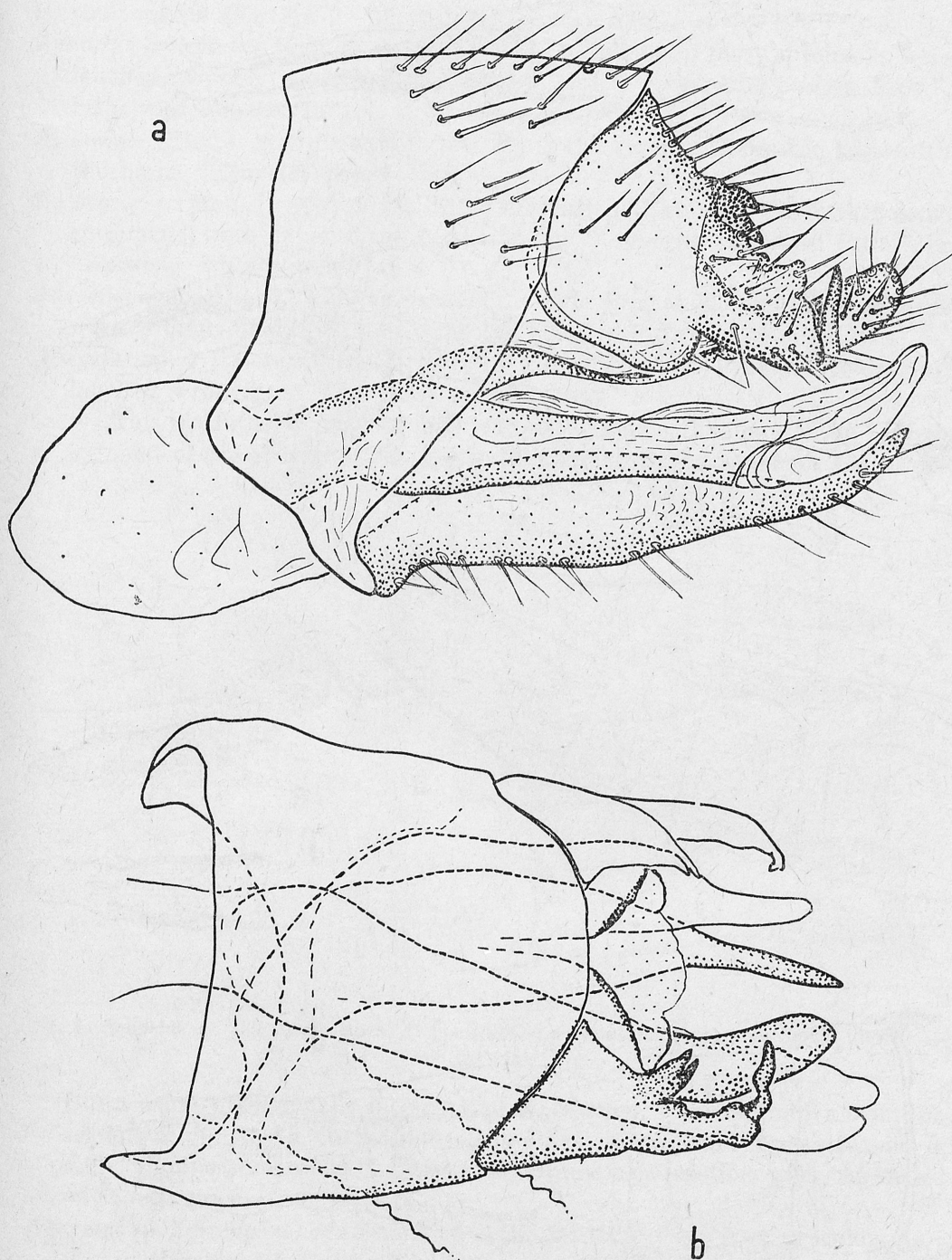


Fig. 1. *Glossosoma boltoni* CURT., genitalia ♂; a — lateral view; b — dorsal view



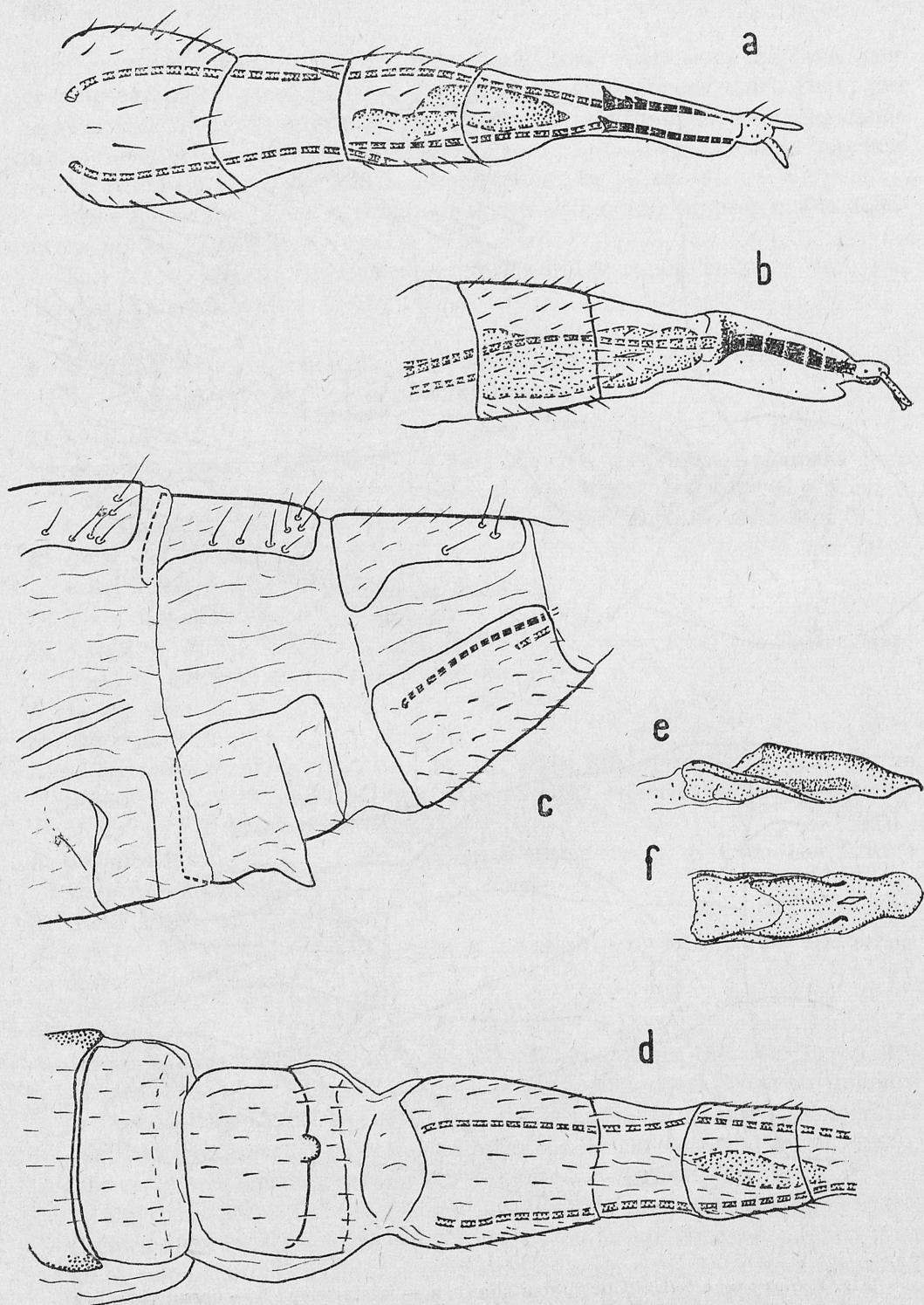


Fig. 2. *Glossosoma boltoni* CURT., ♀; a, b — genitalia, dorsal and lateral views; c — abdomen, segments 5—7, lateral view; d — abdomen, segments 5—8, ventral view; e, f — bursa copulatrix, lateral and dorsal views

*G. intermedium* (KALP.), 3 ♂♂; EC.

*Agapetus delicatulus* McL., 4 ♂♂ 5 ♀♀; EC (Mikuliczyn); most specimens were labelled wrongly as: "*Agapetus pactus* McL", "*Agapetus laniger* PICT.", "*Agapetus comatus* PICT."

*A. laniger* (PICT.), 1 ♂; from the river Prut; the specimen bore the label with the name "*Agapetus pactus* McL."

*A. ochripes* CURT., 5 ♂♂, 5 ♀♀; EC (Mikuliczyn, Tatarów, Chomiak); some specimens were labelled with the name "*Agapetus comatus* PICT." or "*Agapetus delicatulus* McL."

*A. rectigonopoda* BOTS., 3 ♂♂; CF (near the river Prut at Kołomyja); specimens were wrongly identified as "*Agapetus comatus* PICT."

*Agapetus* sp. 1 (*belareca* BOTS.?), 1 ♀; CF (from the river Prut at Kołomyja); labelled wrongly as "*Agapetus comatus* PICT."

This is a hitherto unknown female from this genus, the shape of the VIII-th segment of the abdomen (Fig. 3) is rather similar to the female of *A. fuscipes*

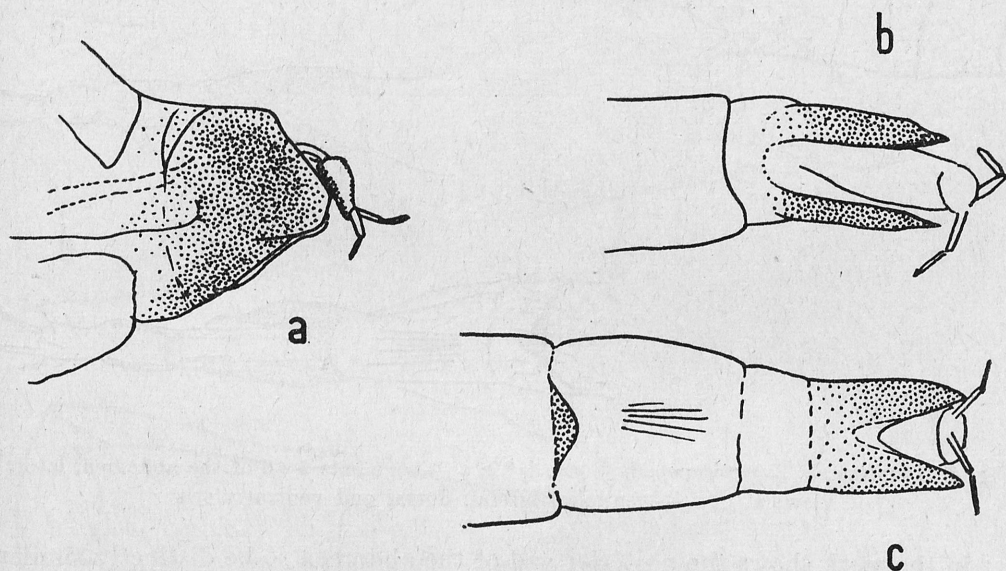


Fig. 3. *Agapetus* sp. 1 (*belareca* BOTS. ?) genitalia ♀; a — lateral view; b — dorsal view; c — ventral view

CURT. I am provisionally placing it as *A. belareca*, a species known from the region of the South Carpathians (the Banat range) and whose female is still unknown, due to the similarity of genital construction with the males of the species\*.

*Agapetus* sp. 2 (*rectigonopoda* BOTS.?), 1 ♀; CF (from the river Prut at Kołomyja); it was wrongly labelled as "*Agapetus comatus* PICT."

\* After the paper was given to be printed the problem of identity of the two unknown females has been solved with help of doz. dr. H. MALICKY from Lunz; the female *Agapetus* sp. 1 was found to be *A. laniger* (PICT.) and *Agapetus* sp. 2 — *A. rectigonopoda* BOTS.

This is the second unknown female from the genus *Agapetus*. I do not believe however that in this case there is a new species hitherto unknown to science. More likely the female belongs to one of the species of *Agapetus* which are known from the Carpathians (BOTOSANEANU, MALICKY 1978), that is, that an error has been made among the hitherto known females of this genus. Such a possibility exists with respect to the female described as *A. rectigonopoda* (BOTOSANEANU 1957a, Ab. 3 EF). An undetailed drawing published

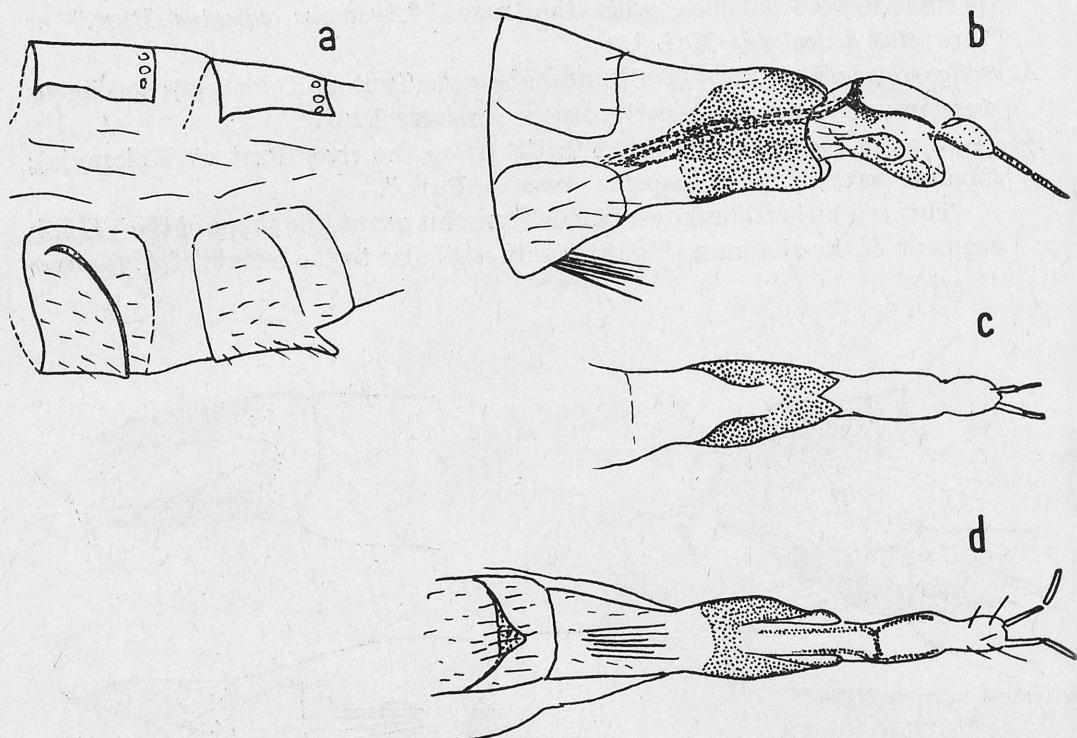


Fig. 4. *Agapetus* sp. 2 (*rectigonopoda* Bots. ?) ♀; a — segments 5–6 of the abdomen, lateral view; a, c, d — genitalia, lateral, dorsal and ventral views

in the work shows the posterior end of the abdomen to be distinctly similar to the abdomen of the female *A. laniger* (Pict.), as shown by TOBIAS (1965). Also in favour of placing the unknown female as *A. rectigonopoda* is the construction of segment VIII of the abdomen (Fig. 4), similar in form to the female of *A. delicatulus*; similarly the genitalia of the males of these two species show a similar construction (e. g. in the shape of the superior appendages)\*. *Synagapetus armatus* (McL), 4 ♂♂, 6 ♀♀; EC (Mikuliczyn, Chomiak); the specimens from Mikuliczyn bore labels with the name "*Agapetus pactus* McL."

#### *Hydroptilidae*

*Hydroptila forcipata* (EAT.), 2 ♀♀; WC (Rytro); they were wrongly identified as "*Hydroptila sparsa* CURT."

\* See foot-note on page 455.



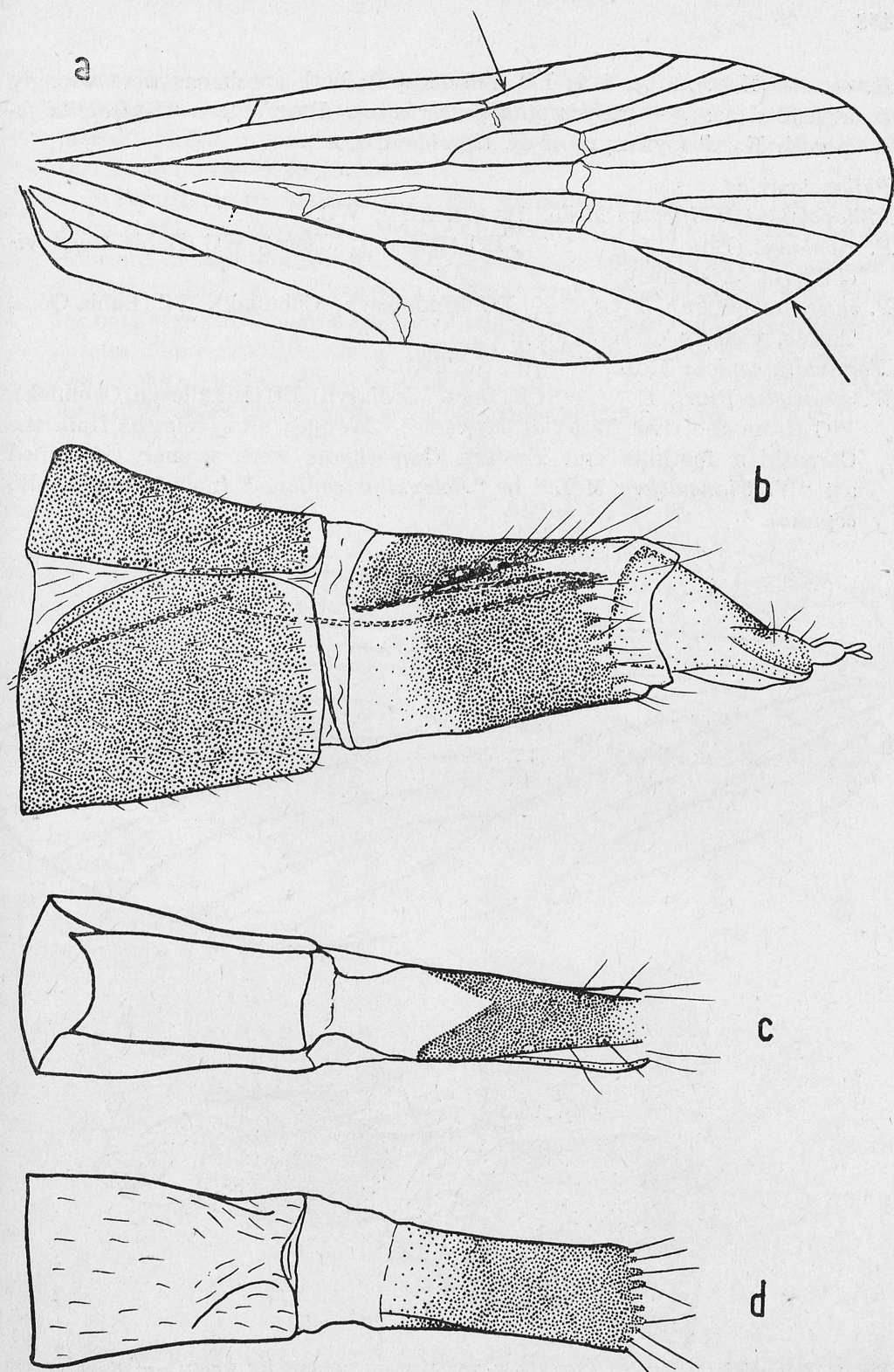


Fig. 5. *Wormaldia copiosa* McL., ♀; a — venation of the anterior wing; b — posterior end of the abdomen, lateral view; c, d — abdomen, segments 7—8, dorsal and ventral views

*H. occulta* (EAT.), 1 ♂, 1 ♀; EC (Mikuliczyn); both specimens were wrongly identified as: ♂ — "*Hydroptila pulchricornis* PICT."; ♀ — "*Hydroptila femoralis* EAT." (synonym of *H. tineoides* DALM.).

### *Philopotamidae*

*Philopotamus ludificatus* McL., 11 ♂♂, 2 ♀♀; WC.

*P. montanus* (DON.), 5 ♂♂, 2 ♀♀; EC (Waratek, Dora), WC (Babia Góra, vicinity of Myślenice).

*P. variegatus* (SCOP.), 5 ♂♂, 5 ♀♀; EC (Mikuliczyn, Chomiak), WC (Babia Góra, Tatras, vicinity of Myślenice).

*Wormaldia copiosa* McL., 3 ♂♂, 1 ♀; Tatras.

*W. occipitalis* (PICT.), 17 ♂♂, 1 ♀; CF (Dora, Młodziatyn), EC (Mikuliczyn, Chomiak), WC (from the river Raba at Myślenice, Zawoja); all specimens from the Carpathian foothills and Eastern Carpathians were wrongly identified as: "*W. triangulifera* McL." or "*Dolophilus copiosus*" (now known as *W. copiosa*).

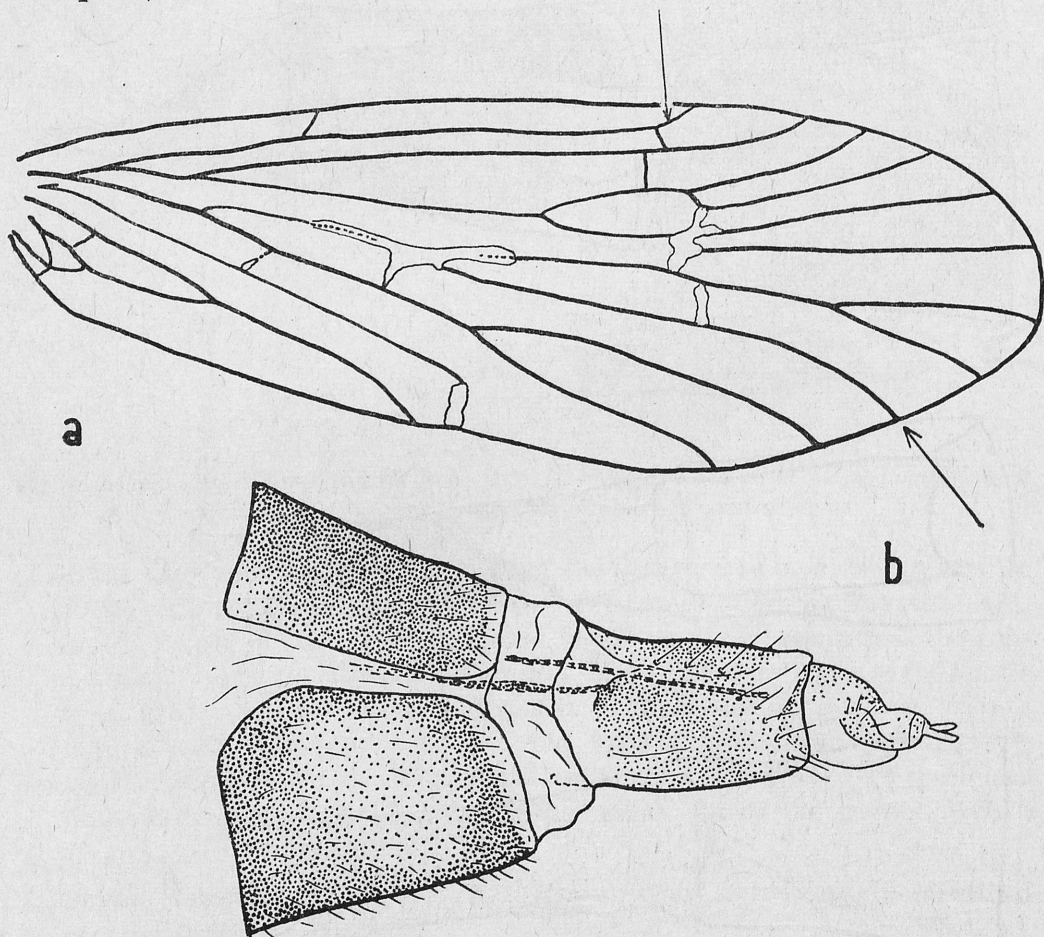


Fig. 6. *Wormaldia occipitalis* (PICT.), a — venation of the anterior wing; b — posterior end of the abdomen, lateral view

*W. pulla* (McL.), 10 ♂♂, 4 ♀♀; EC (vicinity of Mikuliczyn), WC; all specimens from the Eastern Carpathians were wrongly identified as "*Dolophilus copiosus*", also 2 ♂♂ of unknown origin (probably EC) bore the labels with the name "*Tinodes lurida* CURT."

In identifying the males of the genus *Wormaldia* I made use of the works of Roos (1956) and BOTOSANEANU (1960) however I could not find exact descriptions in the literature of the females of these species. I based their identification mainly on the venation of their wings. The venation is identical for both sexes of the same species, but differences are shown between different species. The venation of the anterior wings and the shape of the posterior end of the abdomen of the females are illustrated in figs. 5—7. The important differences in wing venation are indicated by arrows.

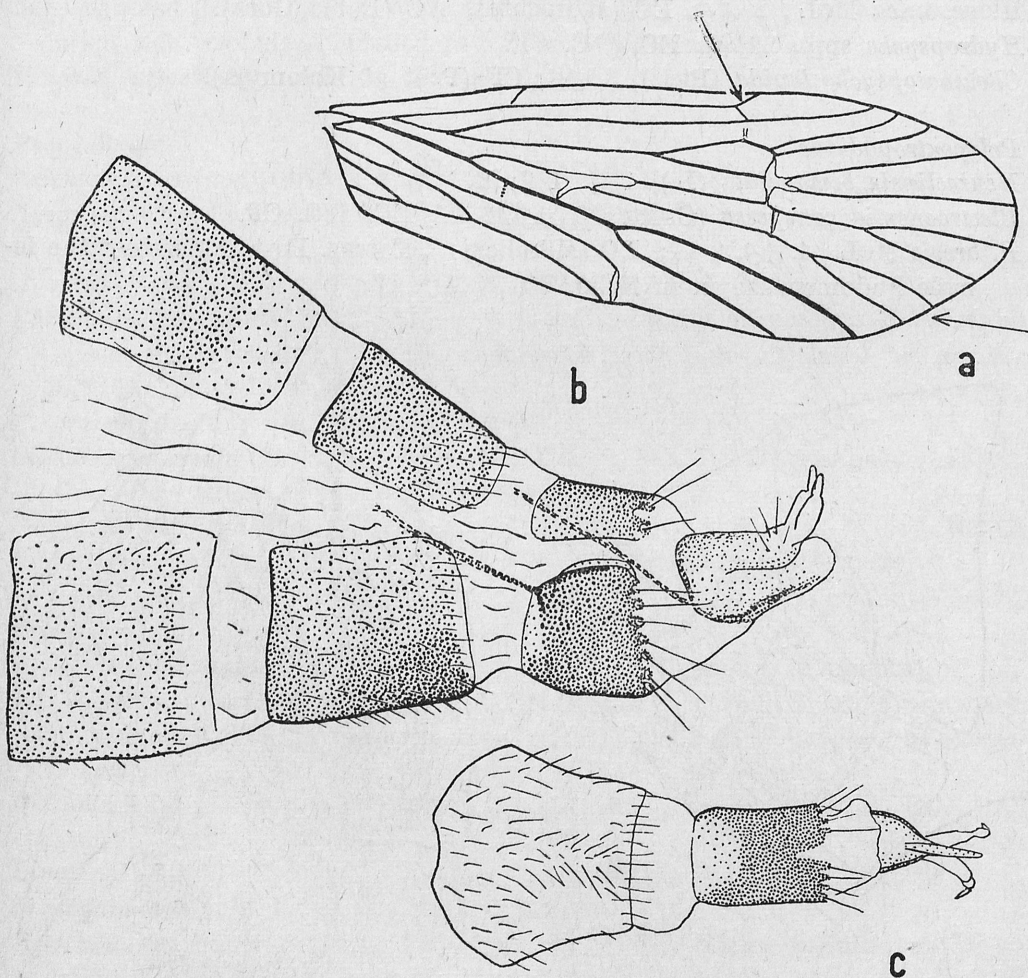


Fig. 7. *Wormaldia pulla* (McL.), ♀; a — venation of the anterior wing; b, c — posterior end of the abdomen, lateral and ventral views



*Hydropsychidae*

*Hydropsyche angustipennis* (CURT.), 6 ♂♂; R (vicinity of Lvov), WC (foothills of Babia Góra); 1 ♂ from near Lvov, was wrongly identified as "*H. guttata* PICT."

*H. bulbifera* McL., 4 ♂♂; CF (Kołomyja), WC (Raba near Myślenice); 1 ♂ from Myślenice was wrongly identified as "*H. guttata* PICT."

*H. contubernalis* McL., 4 ♂♂; CF (on the river Prut in Kołomyja); all specimens labelled wrongly as "*H. guttata* PICT."

*H. dissimulata* KUM. et BOTS., 2 ♂♂; on the upper Bug at Poturzyca near Sokal; were wrongly identified as "*H. exocellata* DUF."

*H. instabilis* (CURT.), 6 ♂♂; EC (Mikuliczyn).

*H. pellucidula* (CURT.), 14 ♂♂; EC (Mikuliczyn, Chomiak), CF (Kołomyja); all specimens wrongly identified as "*H. fulvipes* CURT."

*H. saxonica* McL., 2 ♂♂; EC (Worochta), WC (Babia Góra).

*Hydropsyche* spp., 29 ♀♀; EC, WC, CF.

*Cheumatopsyche lepida* (Pict.), 3 ♂♂; CF (Prut at Kołomyja).

*Polycentropodidae*

*Neureclipsis bimaculata* (L.), 1 ♂, 1 ♀; R.

*Plectrocnemia conspersa* (CURT.), 3 ♂♂, 2 ♀♀; EC, WC, CF.

*P. brevis* McL., 4 ♂♂, 2 ♀♀; EC (Mikuliczyn), Tatras. Posterior end of the female abdomen shown in fig. 9.

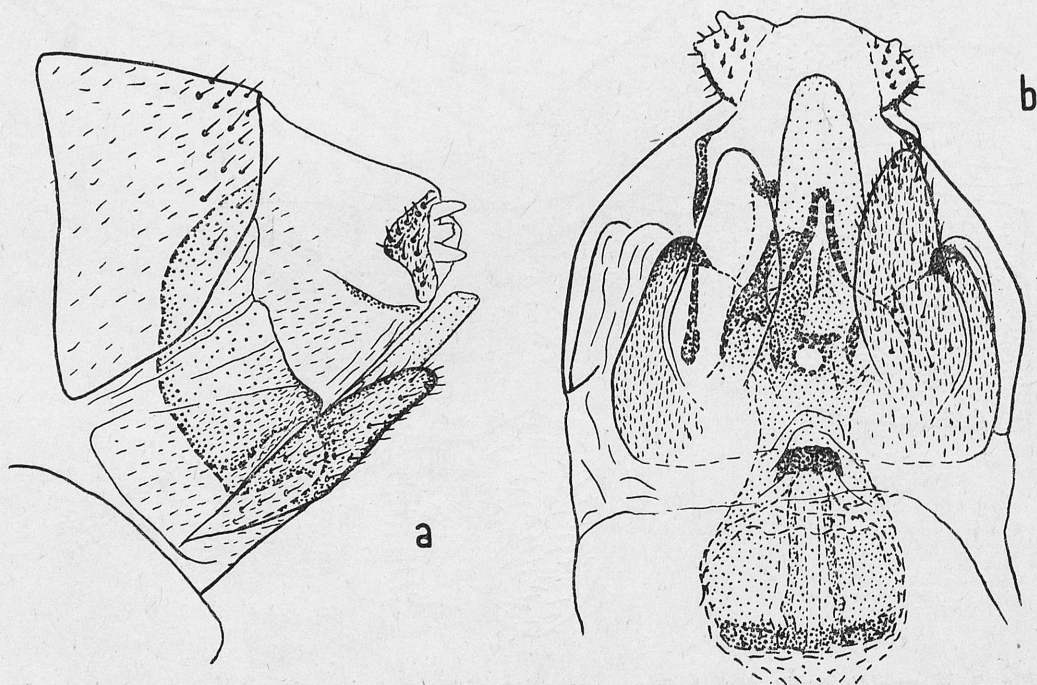


Fig. 8. *Plectrocnemia brevis* McL., genitalia ♀; a — lateral view; b — ventral view

*Polycentropus flavomaculatus* (PICT.), 15 ♂♂ 5 ♀♀; EC, CF, WC; some specimens including those from Mikuliczyn (EC) also from Myślenice and Rytro (WC) bore the labels with the name "*P. multiguttatus* CURT."

*P. irroratus* CURT., 2 ♂♂; place of capture unknown.

*P. schmidi* NOVAK et BOTS., 1 ♂; WC (foothills of Babia Góra); wrongly identified as "*P. flavomaculatus* PICT.?"

*Holocentropus dubis* (RAMB.), 10 ♂♂, 3 ♀♀; CF.

*Cyrnus flavidus* McL., 1 ♂; R (vicinity of Lvov); wrongly identified as "*Polycentropus flavomaculatus* PICT."

*C. trimaculatus* (CURT.), 1 ♂; WC (foothills of Babia Góra).

### *Psychomyidae*

*Psychomyia pusilla* (FABR.), 16 ♂♂, 10 ♀♀; EC, WC.

*Lype phaeopa* (STEPH.), 1 ♂, 5 ♀♀; CF (Kołomyja), R; 1 ♀ caught near Kołomyja was wrongly identified as "*Tinodes pallidula* McL."

*Tinodes rostocki* McL., 2 ♂♂, 3 ♀♀; EC, WC.

### *Phryganyidae*

*Trichostegia minor* (CURT.), 1 ♂, 1 ♀; R.

*Agrypnia obsoleta* HAGEN, 3 ♂♂, 3 ♀♀; R, Tatras.

*A. pagetana* CURT., 4 ♂♂; CF.

*A. varia* (FABR.), 6 ♂♂, 7 ♀♀; PU, R, CF, vicinity of Cracow.

*Phryganea bipunctata* RETZ., 7 ♂♂, 8 ♀♀; R (vicinity of Lvov), CF, Tatras; one of the specimens from the vicinity of Lvov bore the label "*P. grandis* L.", the others "*P. striata* L."

*P. grandis* L., 1 ♂, 3 ♀♀; Tatras, CCU.

*Oligotrichia striata* (L.), 6 ♂♂, 4 ♀♀; CF, PU, R, EC, Tatras; all specimens bore the labels with the name "*Neuronina ruficrus* SCOP."

*Hagenella clathrata* (Kol.), 1 ♂, 1 ♀; on the upper Bug at Poturzyca near Sokal.

*Oligostomis reticulata* (L.), 8 ♂♂; PU, CF, in the vicinity of Cracow.

### *Brachycentridae*

*Brachycentrus montanus* KLAP., 2 ♂♂, 1 ♀; EC (Chomiak, Worochta).

*B. subnubilus* CURT., 4 ♂♂, 6 ♀♀; PU, CF (Kołomyja), WC (Rytro, Wadowice); 1 ♂ from Kołomyja bore the label with the name "*Brachycentrus carpathicus* Dz."

*Oligopteryx maculatum* (FOURCR.), 13 ♂♂, 4 ♀♀; CF (Kołomyja), EC.

### *Limnephilidae*

*Ironoquia dubia* (STEPH.), 3 ♂♂, 1 ♀; CF.

*Apatania carpathica* SCHMID, 13 ♂♂, 4 ♀♀; EC (Chomiak, Mikuliczyn, Tatarów); all specimens wrongly identified as "*Apatania meridiana* McL."

*A. fimbriata* (PICT.), 15 ♂♂; Tatras; 3 ♀♀ were wrongly identified as "*Apatania wallengreni* McL."

- Drusus annulatus* (STEPH.), 2 ♂♂; Tatras.
- D. biguttatus* (PICT.), 3 ♂♂, 2 ♀♀; Tatras; 1 ♂ and 1 ♀ from the spring Lodowe Źródło in Dolina Kościeliska were wrongly identified as "*Drusus mixtus* PICT."
- D. brunneus* KLAP., 3 ♂♂, 3 ♀♀; EC.
- D. carpathicus* DZ., 1 ♂; this specimen is labelled with the following notes: "Czarnohora, Dancierz 31. V. 1911" and "*Drusus carpathicus* DZ. ♂ ver. C. TOMASZEWSKI", and is registered in the inventory under number 8/25. DZIĘDZIELEWICZ (1911a) described the species on the basis of specimens collected "near the summit of Chomiak by springs of the stream Roskólski during the period 27. V — 11. VI. 1909 and at Czarnohora near Howerla and Dancierz on the days 30. V. 1909 and 10. VI. 1910". DZIĘDZIELEWICZ also noted that all the specimens collected in this period were deposited in the museum at Lvov. Therefore the male deposited at Cracow does not belong to this series of specimens which enabled DZIĘDZIELEWICZ to describe a new species, nevertheless it does come from the "locus typicus".
- D. discolor* (RAMB.), 3 ♂♂, 7 ♀♀; EC, Tatras; 1 ♂ from the Tatras was wrongly identified as "*Drusus destitutus* KOL."
- D. trifidus* McL., 6 ♂♂, 3 ♀♀; EC, CF, Tatras.
- Ecclisopteryx dalecarlica* KOL., 12 ♂♂, 16 ♀♀; EC, WC; specimens from the Eastern Carpathians were labelled with the names: "*Peltostomis sudetica* KOL." or "*Ecclisopteryx dziedzielewiczi* KLAP.", specimens from the Western Carpathians however were noted as "*Ecclisopteryx guttulata* PICT."
- E. madida* (McL.), 3 ♂♂, 4 ♀♀; EC, Tatras.
- Limnophilus affinis* CURT., 1 ♂, 6 ♀♀; R, CF, EC, Tatras.
- L. auricula* CURT., 1 ♂, 7 ♀♀; R, CF, the upper Bug, vicinity of Cracow.
- L. binotatus* CURT., 3 ♂♂, 6 ♀♀; R, CF; the specimens were labelled as "*Limnophilus xanthodes* McL."
- L. bipunctatus* CURT., 1 ♂; CF
- L. centralis* CURT., 1 ♀; WC (Babia Góra).
- L. coenosus* CURT., 2 ♂♂, 2 ♀♀; EC (Czarnohora), WC (Babia Góra).
- L. decipiens* (KOL.), 6 ♂♂, 6 ♀♀; R, CF, Tatras.
- L. dispar* McL., 1 ♂, 1 ♀; R (vicinity of Lvov), WC (vicinity of Myślenice); the male from the vicinity of Myślenice was wrongly identified as "*Limnophilus extricatus* McL.", the female from the vicinity of Lvov was mistaken as "*Stenophylax alpestris* KOL." (now known as *Rhadicoleptus alpestris sylvanocarpathicus* BOTS. et RIEDEL).
- L. extricatus* McL., 7 ♂♂, 10 ♀♀; R, CF (Kołomyja), EC, WC; 1 ♂ and 1 ♀ caught at Kołomyja were wrongly identified as "*Limnophilus hirsutus* PICT."
- L. flavicornis* (FABR.), 3 ♂♂, 5 ♀♀; PU, R, CF.
- L. fuscicornis* RAMB., 3 ♂♂, 5 ♀♀; CF.
- L. griseus* (L.), 12 ♂♂, 16 ♀♀; PU, R, CF, EC, WC.
- L. ignavus* McL., 4 ♂♂, 3 ♀♀; R, CF, EC, Tatras.
- L. lunatus* CURT., 7 ♂♂, 14 ♀♀; PU, R, CF, WC.



- L. nigriceps* (ZETT.), 13 ♂♂; R, CF.
- L. politus* McL., 14 ♂♂, 7 ♀♀; R, CF.
- L. rhombicus* (L.), 1 ♂, 5 ♀♀; PU, CF, EC.
- L. sericeus* (SAY), 1 ♀; EC (Angielów); wrongly identified as "*Limnophilus griseus* L."
- L. sparsus* CURT., 4 ♂♂, 4 ♀♀; R, CF, EC.
- L. stigma* CURT., 7 ♂♂, 6 ♀♀; R, CF, EC.
- L. subcentralis* BRAU., 1 ♂; R.
- L. vittatus* (FABR.), 2 ♂♂, 8 ♀♀; R, EC.
- Colpotauius incisus* (CERT.), 1 ♂; CF.
- Grammotaulius nigropunctatus* (RETZ.), 11 ♂♂, 3 ♀♀?; PU, R, CF, EC, WC;  
I have not found any basic morphological difference between the females of *G. nigropunctatus* and *G. nitidus* MULL. deposited in the Cracow collection, therefore their specific status is doubtful.
- Glyphotaelius pellucidus* (RETZ.), 3 ♂♂, 2 ♀♀; R, CF.
- Nemotaulius punctatolineatus* (RETZ.), 1 ♂, 2 ♀♀; R, the vicinity of Cracow.
- Phacopteryx brevipennis* (CURT.), 4 ♀♀; EC.
- Anabolia concentrica* (ZETT.), 2 ♂♂, 8 ♀♀; CF (Słobódka Leśna, Młodiatyn); all specimens were labelled as "*Arctoecia dualis* McL."
- A. furcata* BRAU., 1 ♀; WC.
- A. laevis* (ZETT.), 33 ♂♂, 7 ♀♀; R, CF.
- Rhadicleptus alpestris sylvanocarpaticus* BOTS. et RIEDEL, 5 ♂♂, 5 ♀♀; R, CF, EC; all specimens were labelled with the old name "*Stenophylax alpestris* KOL."
- Potamophylax carpathicus* (Dz.) 1 ♂, 3 ♀♀; 2 ♀♀ were labelled wrongly as "*Stenophylax millenii* KLAP." (now known as *Potamophylax millenii* (KLAP.)), their labels had the following notes: nr. 16/20 — "Chomiak (Błotek) 3. 7. 1905 Dz.". nr. 43/23 — "Chomiak Potok Barani źródła 27. 6. 1907". The two remaining specimens had identical inventory numbers 6/25, they were named correctly and bore the following labelling: ♂ — "Worochta 12. VI. 1911", ♀ (without the last abdominal segments) — "Worochta 24. VI. 1911 pod Rechaczem". The species was described (DZIĘDZIELEWICZ, 1912) on the basis of specimens collected "near the summits of Chomiak and Rebrowacz at Worochta during the period 12. VI — 6. VII. 1911". I believe, the last two specimens come from the typical series and so satisfy the conditions for syntypes. I am designating as a lectotypus the male of nr. 6/25 with an additional labelling "*Potamophylax carpathicus* (Dz.) ♂ ver. C. TOMASZEW-SKI".
- P. latipennis* (CURT.), 11 ♂♂; EC, WC; some specimens were labelled with the former name "*Stenophylax stellatus* CURT.", however the remainder were wrongly labelled as "*Stenophylax latipennis* CURT." (sensu McL.), (now the synonyme of *Potamophylax cingulatus* STEPH.).
- P. luctuosus* (PILL.), 6 ♂♂; EC.
- P. nigricornis* (PICT.), 6 ♂♂, 1 ♀; EC, WC.

*P. rotundipennis* (BRAU.), 3 ♂♂; CF.

*Acrophylax vernalis* DZ., 2 ♀♀; both specimens have the same inventory number 3/25 and identical labels "Czarnohora, Dancerz 15. V. 1911" and "*Acrophylax vernalis* DZ. ♀ ver. C. TOMASZEWSKI". DZIĘDZIELEWICZ (1912) described this species on the basis of specimens collected from Czarnohora near the summits of Dancerz and Breskul during the period 15—20. V. 1911 thus the specimens deposited in Cracow belong to the typical series and are syntypes. I am designating one of the females preserved in a better state as a lectotype.

*A. zerberus* BRAU., 5 ♂♂, 2 ♀♀; Tatra.

*Chionophylax czarnohoricus* (DZ.), 4 ♂♂; 2 ♂♂ with the inventory number 4/25 are labelled with the inscription "Czarnohora, Dancerz 29. V. 1911" the other two with the inventory number 5/25 are labelled with the inscription "Czarnohora Breskul 1. VI. 1911". DZIĘDZIELEWICZ (1911b) described the species on the basis of 3 ♂♂ collected by K. HUPPENTHAL by a small lake near the summit of Tomnatek, Czarnohora 30. V. 1909 so none of the specimens deposited in Cracow belong to the typical series. However they do come from the "terra typica".

*Halesus digitatus* (SCHRK.), 2 ♂♂, 4 ♀♀; EC.

*H. tessellatus* (RAMB.), 6 ♂♂, 3 ♀♀; CF.

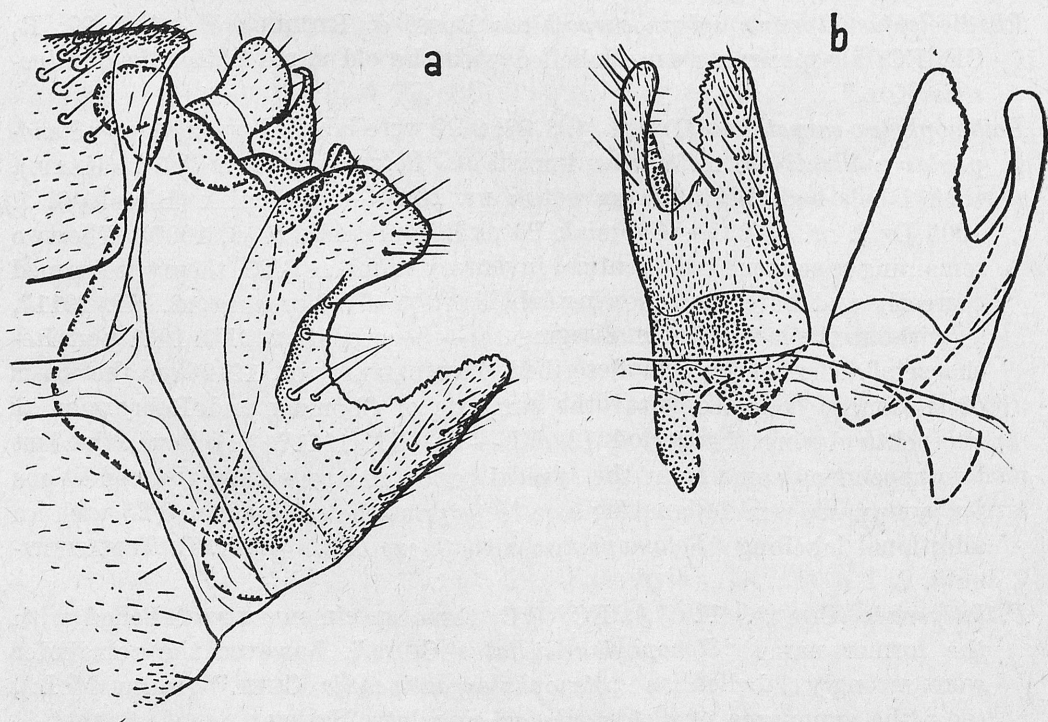


Fig. 9. *Melampophylax nepos triangulifera* BOTS., genitalia ♀; a — lateral view; b — inferior appendages, ventral view

*H. rubricollis* (Pict.), 2 ♂♂, 2 ♀♀; Tatras, Babia Góra; all specimens were wrongly labelled: from the Tatras as "*Halesus mendax* McL.", from Babia Góra as "*Halesus moestus* McL."

*Melampophylax nepos triangulifera* Bots., 6 ♂♂, 2 ♀♀; EC (Chomiak).

The construction of the genital apparatus of the males which I investigated differed somewhat from that described and illustrated by BOȚOSANEAU (1957b) for *M. nepos triangulifera* from Roumania. The main difference is in the construction of the appendices inferiores, and especially their ventral parts, which in the museum specimens are rather wider (fig. 10) and straighter than in the roumanian specimens. It should be noted however that the shape of the ventral part of the appendices inferiores shows some variability, thus specimens collected by DZIĘDZIELEWICZ may belong to this subspecies.

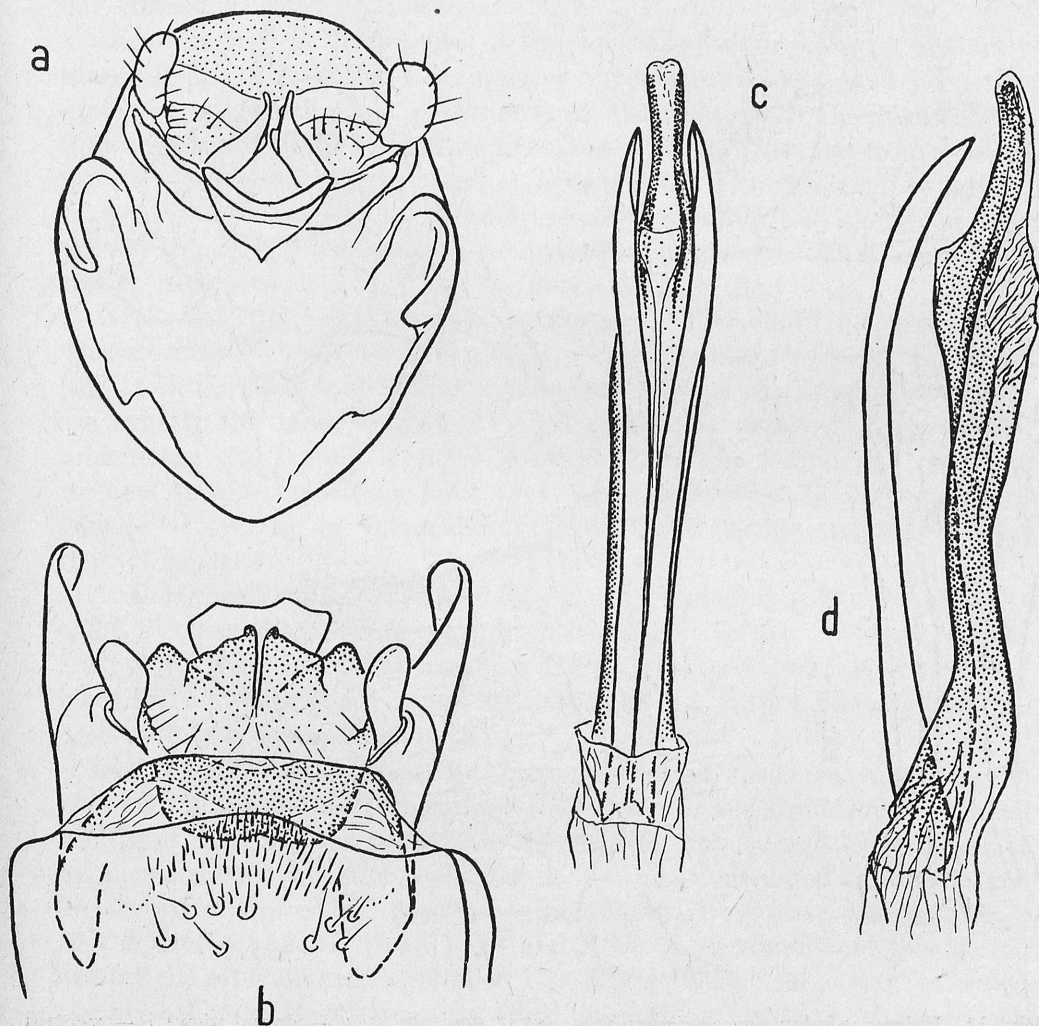


Fig. 10. *Melampophylax nepos triangulifera* Bots., genitalia ♂; a — posterior view; b — dorsal view; c, d — eadeagus dorsal and lateral views



In order to be absolutely certain a greater number of individuals from both populations would have to be examined, and a similar comparison for the females. Unfortunately I could not find a description of the females of *M. nepos triangulifera* in the literature. The construction of the genital apparatus of the female from Chomiak, which I believe to belong to this sub-species, is shown in fig. 12.

*Isogamus aequalis* (KLAP.), 19 ♂♂, 4 ♀♀; EC (Czarnohora foothills: Mikuliczyn, Młodiatyn and Worochta, in Gorgany: Chomiak, Waratek); most specimens were wrongly identified as "*Asynarchus coenosus* CURT." of these 5 ♂♂ were identified as "*Asynarchus coenosus* var. *paludum* KOL.". It should be noted that none of the 23 specimens were caught at Czarnohora, despite

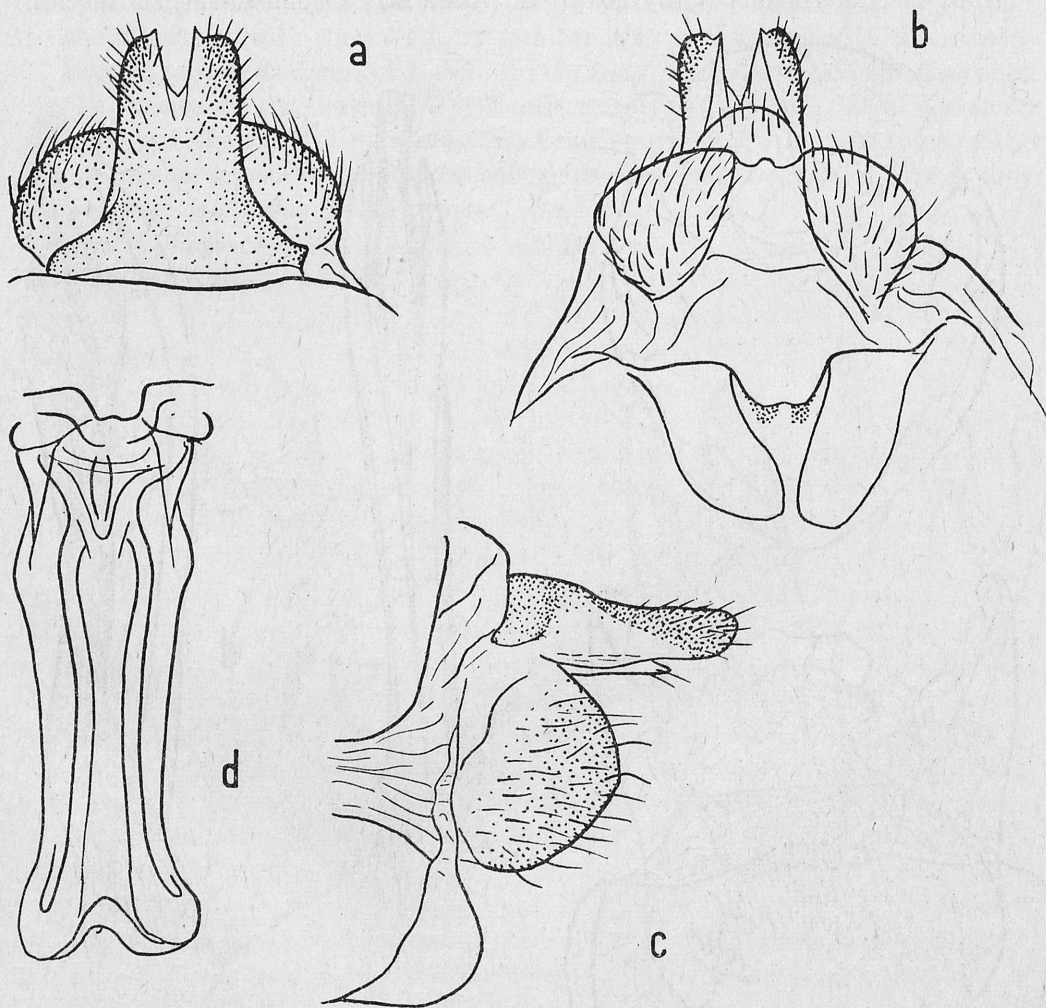


Fig. 11. *Melampophylax nepos triangulifera* BORS., genitalia ♀; a — dorsal view; b — ventral view; c — lateral view; d — vaginal structure

being noted there by DZIĘDZIELEWICZ (1920). The male and female genital apparatus are presented (figs. 13, 14 and 16).

*Isogamus czarnohorensis* (DZIĘDZIELEWICZ, 1912), stat. nov.

*Anisogamus aequalis* KLAP. var. *czarnohorensis*: DZIĘDZIELEWICZ, 1912

*Anisogamus aequalis* KLAP. var. *czarnohorensis*: RACIĘCKA, 1934

*Isogamus aequalis czarnohorensis*: SCHMID, 1955

According to the descriptions of DZIĘDZIELEWICZ (1912, 1919) and RACIĘCKA (1934) this species differs at first glance from the closely related *I. aequalis* KLAP. in both colour and body measurements. The thorax and abdomen of ♂ and ♀ *I. czarnohorensis* are dark brown, distinctly darker than that of *I. aequalis*, the anterior wings of the ♂ are grayish brown darker than the ♀ and distinctly darkening along the veins. These features are often not noticed in museum material.

Genitalia ♂: (figs. 13a—c, 14a, c), the superior appendages have a distinctly rounded shape; the ends of the inferior appendages do not point vertically upwards but are directed posteriorly, in the relation to the segment IX they are situated nearly at right-angles from a lateral view, but from a posterior view they are distinctly parallel. Aedeagus has a narrow semi-cylindrical shape, whose distal end is characteristically narrowed and elongated posteriorly (fig. 14c). Paramerae in the distal part are covered with long narrow spines, rather concentrated on the dorsal surface (fig. 14a).

Genitalia ♀: (fig. 15), the dorsal part of segment IX is short and closely fused with segment X; segment X extended posteriorly into two triangular lobes (fig. 15a), the lobes and the lower plate surrounding the superior aperture are exactly the same length; the ventral lobes of segment IX are long, prominent and completely fused posteriorly, on the lateral and posterior surfaces up to the posterior joint they are characteristically hairy; median lobe of ventral lip of vulva short but distinctly visible and longer than that of *aequalis*.

In the Cracow collection I found 6 ♂♂ and 4 ♀♀ collected by DZIĘDZIELEWICZ and 1 ♀ collected by FUDAKOWSKI from Czarnohora in the Eastern Carpathians; 4 ♂♂ with inventory numbers 37/24, 38/24 and 39/24 were wrongly identified as "*Stenophylax millenii* KLAP." and 1 ♀ with inventory number 2/25 as "*Anisogamus aequalis* KLAP."

DZIĘDZIELEWICZ described this form on the basis of specimens caught by the streams and springs of Czarnohora in the sub-alpine and alpine levels between 1300 and 1700 m asl., during the months of August and September. It happened probably in the year 1910 as the specimens dated from this time are already identified as "*Anisogamus aequalis* KLAP. var. *czarnohorensis* Dz.". In the Cracow collection are 2 ♂♂ and 2 ♀♀ which come from this period bearing the same inventory number 1/25, I believe that these may be called the typical series. I am choosing from these the ♂ lectotype; the specimen has the labelling "Czarnohora, Breskul 25. IX. 1910" and "*Isogamus aequalis*

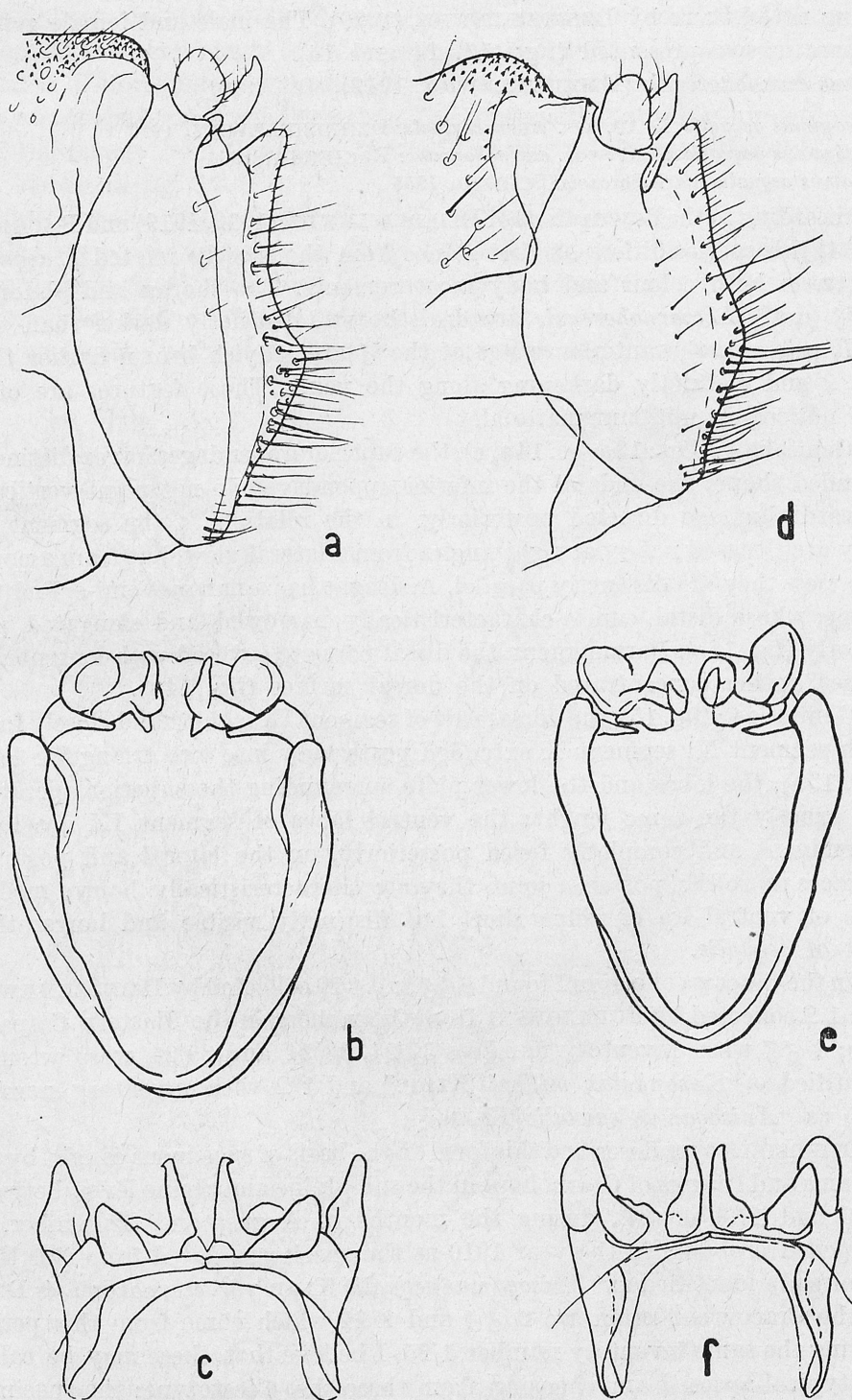


Fig. 12. *Isogamus czarnohorensis* (Dz.), (a, b, c) and *I. aequalis* (KLAP.), (d, e, f) male genitalia;  
a, d — lateral view; b, e — posterior view; c, f — dorsal view



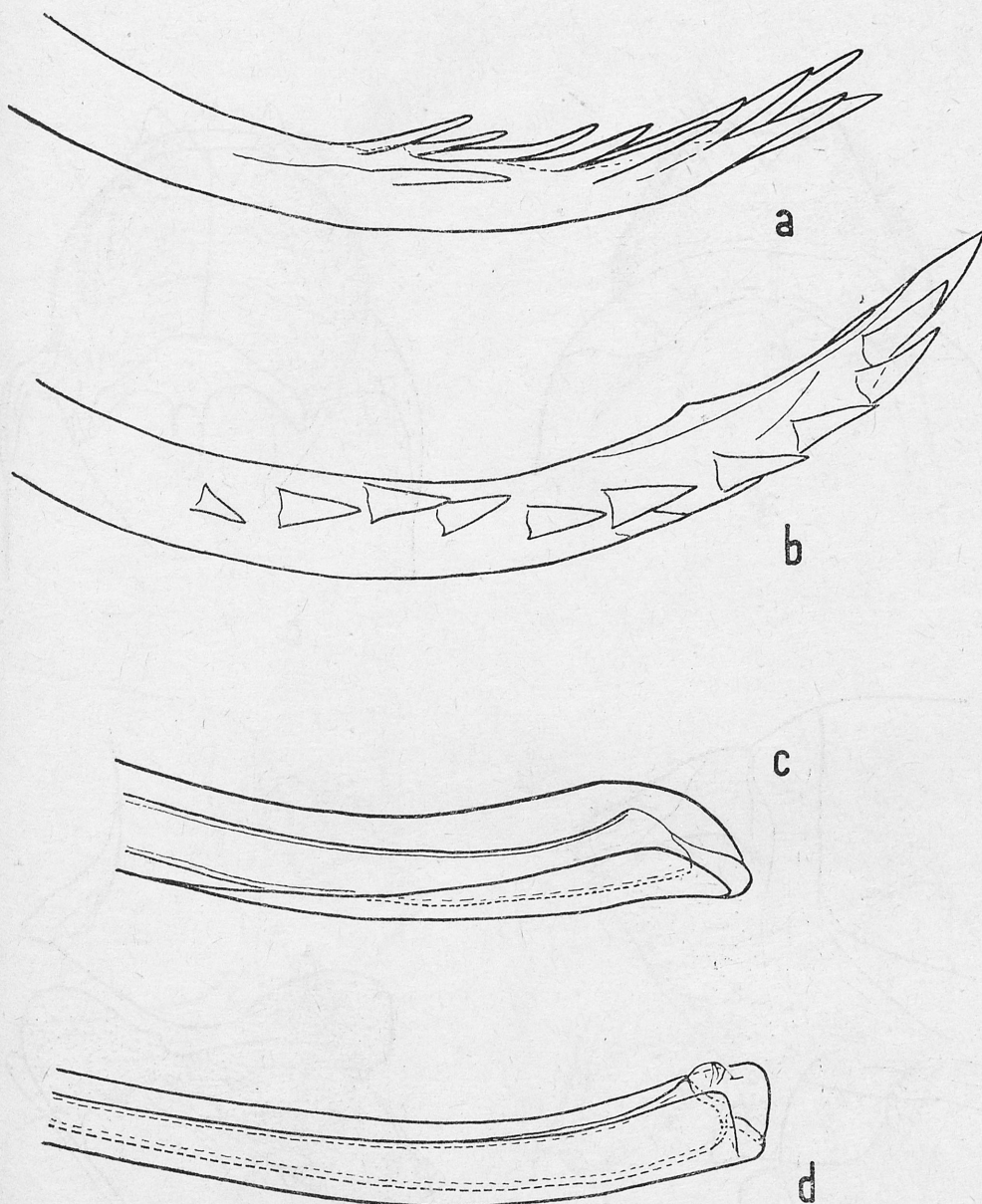


Fig. 13. *Isogamus czarnohorensis* (Dz.), (a,c) and *I. aequalis* (Klap.), (b, d), aedeagus and paramerae, lateral view

*czarnohorensis* (Dz.) ver. C. TOMASZEWSKI". The abdomen of the lectotype as well as the paralectotypes are macerated in KOH.

*Parachiona picicornis* (Pict.), 4 ♂♂; CF, EC.

*Stenophylax permistus* McL., 1 ♀; R.

*S. speluncarum* McL., 1 ♂; EC (Młodziatyn); wrongly identified as "*Stenophylax concentricus* ZETT."

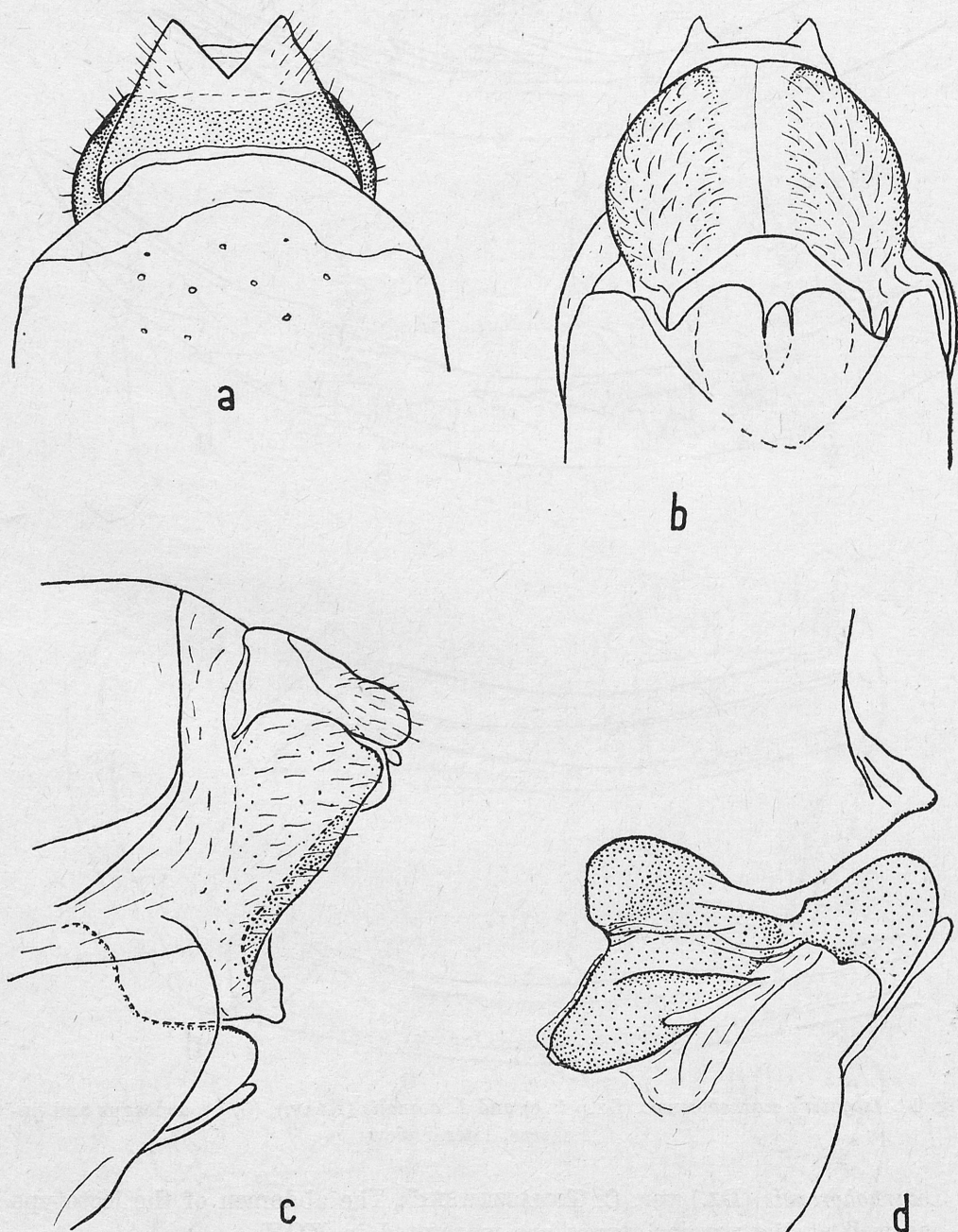


Fig. 14. *Isogamus czarnohorensis* (D.z), genitalia ♀; a — dorsal view; b — ventral view; c — lateral view; d — vaginal structure, lateral view (further enlarged)

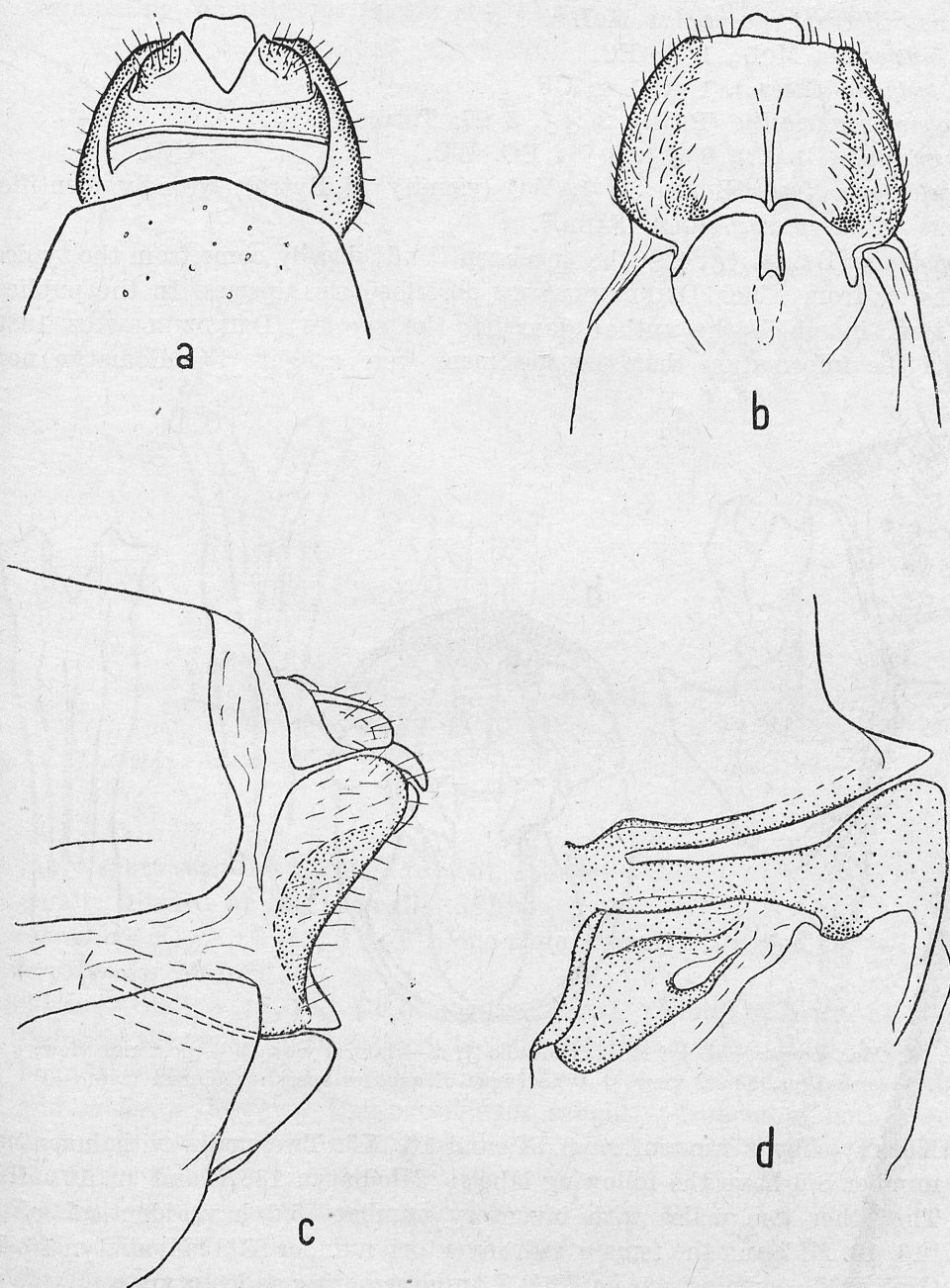


Fig. 15. *Isogamus aequalis* (KLAP.), genitalia ♀; a — dorsal view; b — ventral view; c — lateral view; d — vaginal structure, lateral view (further enlarged)



*Micropterna lateralis* (STEPH.), 1 ♂, 1 ♀; EC (Tatarów); both specimens were wrongly identified: the male as "*Stenophylax concentricus* ZETT.", the female as "*Micropterna sequax* McL.".

*M. nycterobia* McL., 1 ♂; EC.

*M. testacea* (GMEL.), 1 ♂, 1 ♀; CF.

*Allogamus auricollis* (PICT.), 3 ♂♂, 3 ♀♀; Tatras.

*A. uncatus* (BRAU.), 6 ♂♂, 2 ♀♀; EC, WC.

*Chaetopteryx fusca* BRAU., 1 ♂; WC (vicinity of Rytro); wrongly identified as "*Chaetopteryx villosa* FABR.".

*C. polonica* Dz., 4 ♂♂, 1 ♀; the specimens undoubtedly come from the typical series from which DZIĘDZIELEWICZ described this species. In the publication, in which the author describes the species (DZIĘDZIELEWICZ 1889) is the information that the specimens were caught "at Młodiatyn near

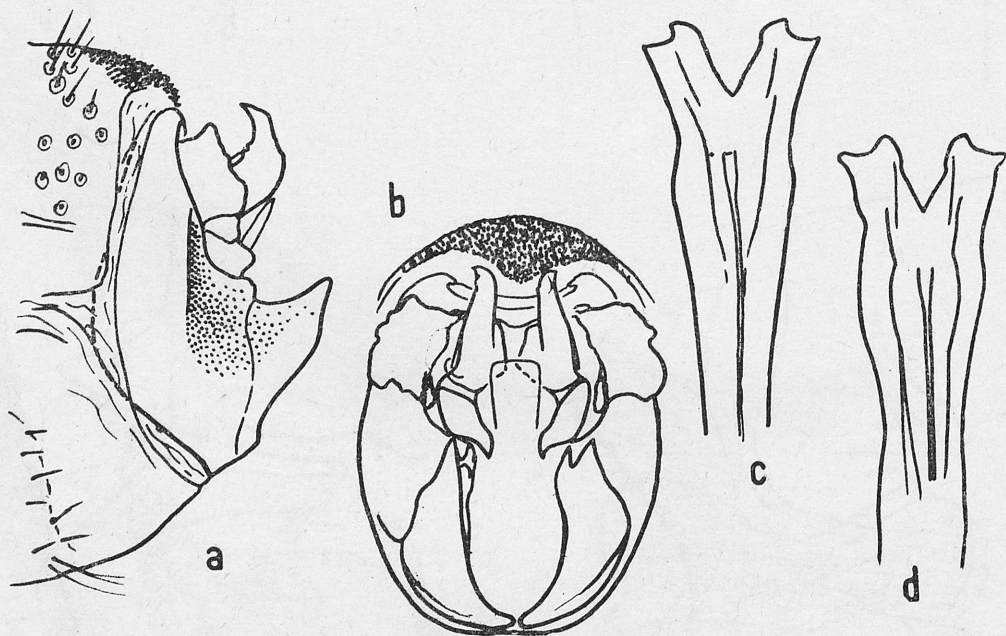


Fig. 16. *Chaetopteryx sahlbergi* McL., genitalia ♂; a — lateral view; b — posterior view; c — aedeagus, dorsal view; d — aedeagus of another specimen, dorsal view

Kołomyja by a stream.... 3. X. and 16. X". Two males with inventory number 8/6 have the following labels: "Młodiatyn 1887" and "2. 10. Ml.". The other two males with inventory number 75/9 have identical labels "16. 10. Ml." and the female with inventory number 33/8 "Młodiatyn 16. 10 (Kołom.)". A male from no. 75/9 I am designating as lectotype.

*C. sahlbergi* McL., 7 ♂♂ 2 ♀♀; CF (Słobódka Leśna), EC (Chomiak, Worochta, Młodiatyn).

There is a certain variability in the shape of the male and female genital apparatus. It appears that the most typical specimens differ in, amongst others,

the following features. In the male the appendices intermediares have very weakly defined and highly placed lateral teeth (fig. 17a,b), the hooklets terminating the aedeagus weakly shaped (fig. 17c, d). The female has a no-

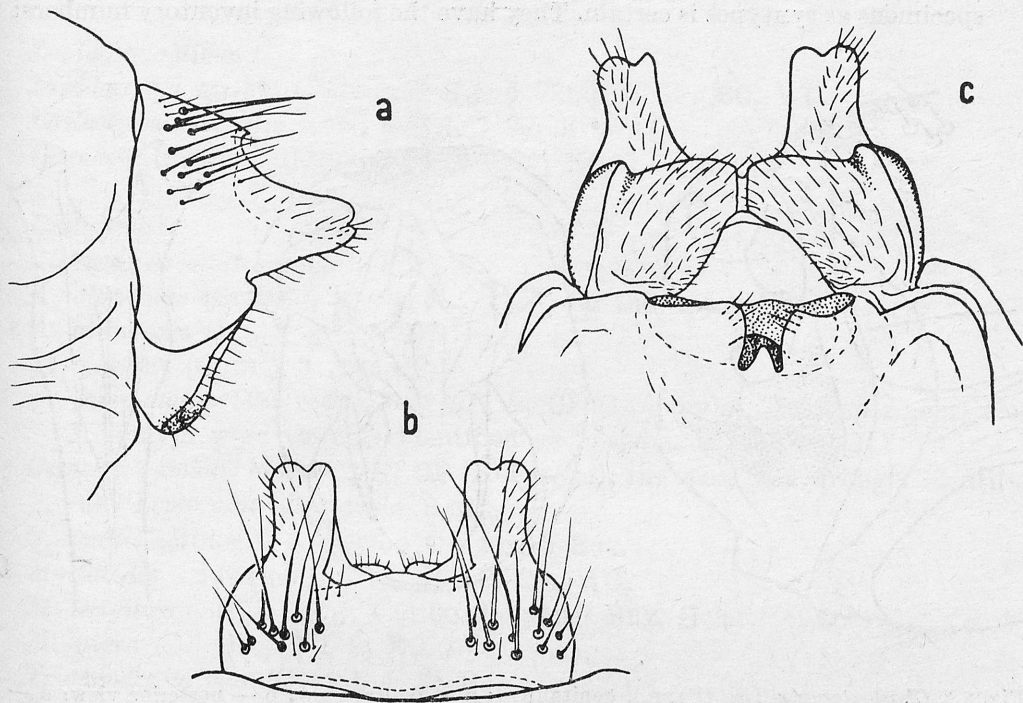


Fig. 17. *Chaetopteryx sahlbergi* McL., genitalia ♀; a — lateral view; b — dorsal view; c — ventral view

tably short segment IX (fig. 18a, b), the structures of segment X are generally divided at the ends (fig. 18b).

*C. subradiata* KLAP., 9 ♂♂, 1 ♀; EC; one male wrongly identified as "*Chaetopteryx maior* McL."

*C. villosa* (FABR.), 3 ♂♂, 1 ♀; CF (Słobódka Leśna), vicinity of Lvov. Słobódka Leśna is the most south-easterly locality for this species. Here is also the boundary between the distributions of two closely related species *villosa* and *sahlbergi*, however DZIĘDZIELEWICZ caught specimens of both species from this locality. The male genitalia of *villosa* from Słobódka Leśna are shown in fig. 19.

*Psilopteryx psorosa carpathica* SCHMID, 7 ♂♂, 4 ♀♀; EC.

*Annitella obscurata* (McL.), 21 ♂♂, 4 ♀♀; EC.

*A. chomiensis chomiensis* (Dz.), 9 ♂♂, 2 ♀♀; EC (Gorgany to the North of Worochta); 7 specimens were labelled with "*Heliconis Klapaleki* DZIĘDZ."

DZIĘDZIELEWICZ (DZIĘDZIELEWICZ, KLAPALEK, 1908) described this species from a series of specimens collected "by the stream Gnilec, by the lower reaches of Barani stream on the southern slopes of the summit of Chomiak and also

by the rivers Prutec and Błotek" in the autumn of 1907, beginning from the end of September. 7 ♂♂ and 2 ♀♀ from the collections in Cracow come from this time and place given by DZIĘDZIELEWICZ, thus the status of these specimens as syntypes is certain. They have the following inventory numbers:

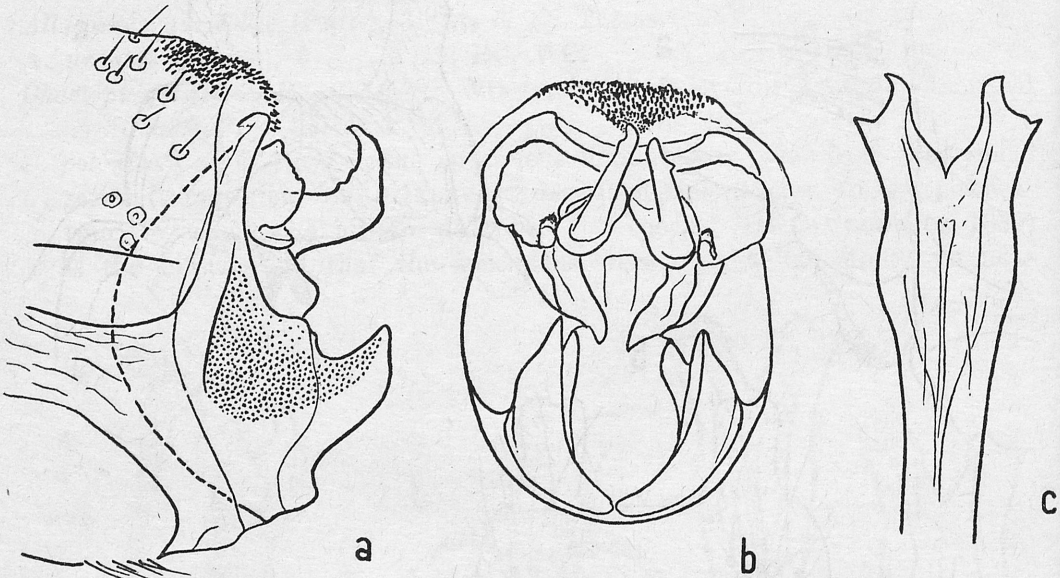


Fig. 18. *Chaopteryx villosa* (FABR.), genitalia ♂; a — lateral view; b — posterior view; c — aedeagus, dorsal view

82/23—(6 ♂♂, 1 ♀), 69/24—(1 ♂, 1 ♀). From them is designated the lectotype of male — 82/23 — with the label "Chomiak, Błotek 20. 10. 1907".

"*A. kosciuszki* Klap.", 11 ♂♂; EC (the valley of the upper Prut between Tata-rów and Foreszczenka); identified by DZIĘDZIELEWICZ. According to SZCZĘSNY (1979) all these specimens are hybrids of parental forms of *A. chomiacensis chomiacensis* and *A. chomiacensis lateroproducta* (BOTS.), and *A. kosciuszki*, does not exist as a separate unit.

#### *Georidae*

*Goera pilosa* (FABR.), 19 ♂♂, 7 ♀♀; CF, EC, WC.

*Lithax niger* HAG., 3 ♂♂; EC (Czarnohora, Chomiak).

*L. obscurus* (HAG.), 1 ♂; EC; wrongly identified as "*Lithax niger* HAG."

I have inserted a detailed drawing of the genitals of this specimen (fig. 19) since there is no exact description and illustration of this species in the trichopterological literature.

*Silo graellsii* ED. PICT., 7 ♂♂, 7 ♀♀; EC (Mikuliczyn); all specimens were wrongly identified as: "*Silo pallipes* FABR." or "*Silo piceus* BRAU."



- S. nigricornis* (PICT.), 1 ♂, 1 ♀; WC.  
*S. pallipes* (FABR.), 6 ♂♂, 3 ♀♀; CF, WC.  
*S. piceus* (BRAU.), 11 ♂♂, 4 ♀♀; CF, EC, WC.

#### *Lepidostomatidae*

- Lepidostoma hirtum* (FABR.), 4 ♂♂, 5 ♀♀; PU, CF, EC, WC.  
*Lasiocephala basalis* KOL., 4 ♂♂, 7 ♀♀; EC, WC.  
*Crunoetia irrorata* (CURT.), 6 ♂♂, 6 ♀♀; EC, PU, WC.

#### *Leptoceridae*

- Athripsodes albifrons* (L.), 1 ♂; R.  
*A. aterrimus* (STEPH.), 6 ♂♂, 2 ♀♀; CF, on the upper Bug.  
*A. bilineatus* (L.), 8 ♂♂, 5 ♀♀; EC.  
*A. cinereus* (CURT.), 3 ♂♂; CF.  
*A. commutatus* (ROSTOCK), 6 ♂♂, 1 ♀; CF (Kołomyja), EC; specimens from Kołomyja were wrongly identified as "*Leptocerus albifrons* L."  
*Ceraclea ramburi* MORSE, 1 ♂; CF (Kołomyja); the male was wrongly identified as "*Leptocerus albimacula* RAMB."  
*C. senilis* (BURM.), 4 ♂♂; on the upper Bug.  
*Mystacides azurea* (L.), 6 ♂♂, 2 ♀♀; CF, WC.  
*M. longicornis* (L.), 5 ♂♂, 1 ♀; on the upper Bug, vicinity of Lwów.  
*M. nigra* (L.), 7 ♂♂, 1 ♀; EC.  
*Triaenodes bicolor* (CURT.), 1 ♂; R.  
*T. simulans* TJED., 3 ♂♂; CF (on the river Prut at Kołomyja), WC (vicinity of Myślenice); 2 males from Kołomyja were wrongly identified as "*Triaenodes bicolor*?", but the male from Myślenice as "*Triaenodes conspersa* RAMB.". This is a new species for the Polish fauna within the country's present borders. The genital structure of the male is shown in fig. 20.  
*Oecetis furva* (RAMB.), 7 ♂♂, 2 ♀♀; CF (Słobódka Leśna), on the upper Bug; the male from Słobódka Leśna was wrongly identified as "*Oecetis lacustris* PICT."  
*Setodes punctatus* (FABR.), 3 ♂♂, 2 ♀♀; CF.

#### *Sericostomatidae*

- Notidobia ciliaris* (L.), 9 ♂♂, 3 ♀♀; CF, EC, WC.  
*Oecismus monedula* (HAG.), 1 ♂, 1 ♀; WC (near Myślenice).  
*Sericostoma personatum* SPENCE, 2 ♂♂; EC.  
*S. flavicorne* SCHNEIDER, 9 ♂♂; EC.  
*Sericostoma* spp., 19 ♀♀; these are indistinguishable females belonging to the two above-mentioned species of this genus.

#### *Beraeidae*

- Beraea pullata* (CURT.), 3 ♂♂; R, EC.  
*Ernodes articularis* (PICT.), 3 ♂♂, 4 ♀♀; EC, WC.

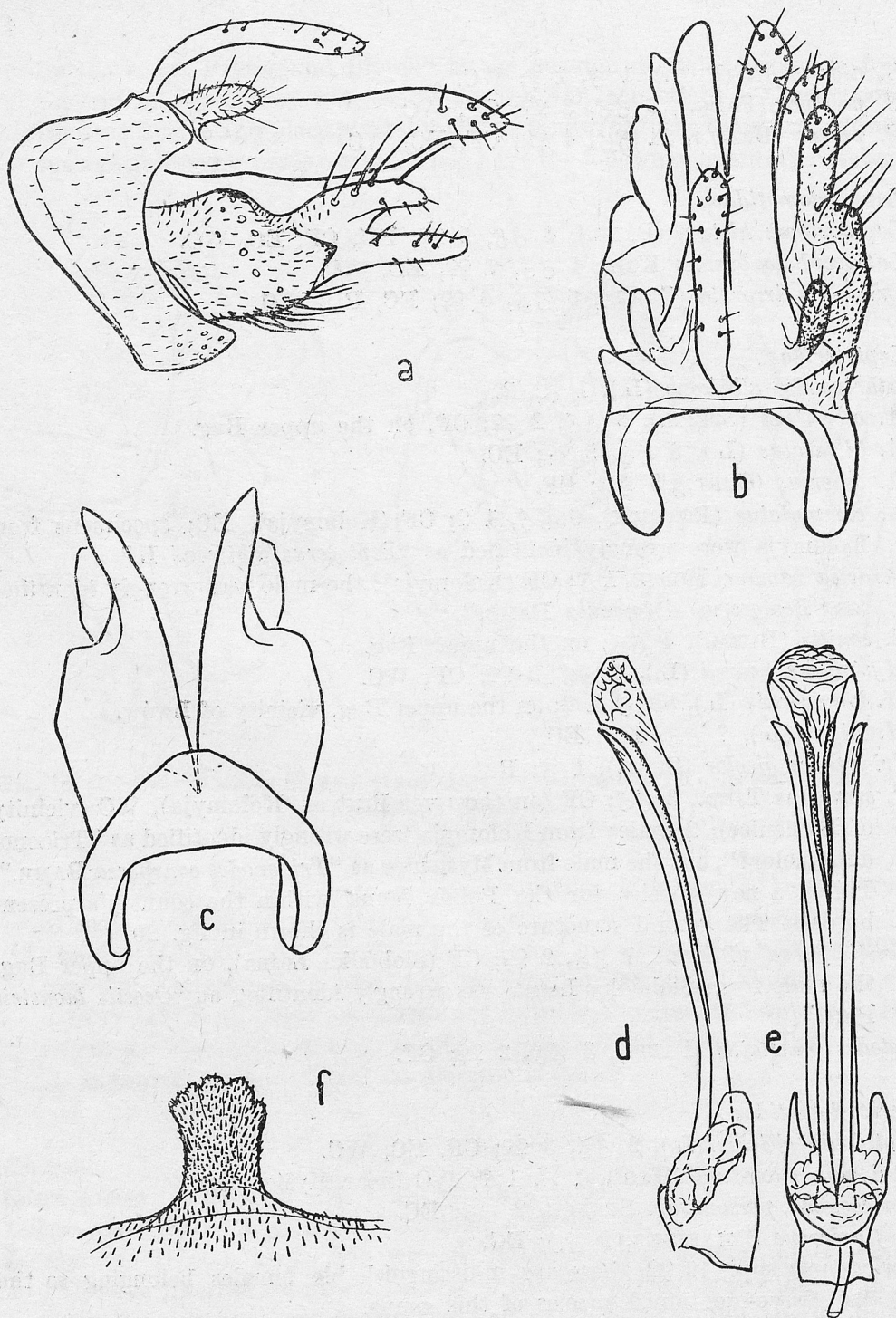


Fig. 19. *Lithax obscurus* (HAG.), genitalia ♂; a — lateral view; b — dorsal view; c — ventral view; d, e — aedeagus and paramerae, lateral and ventral views; f — ventral process of sixth sternite (further enlarged)

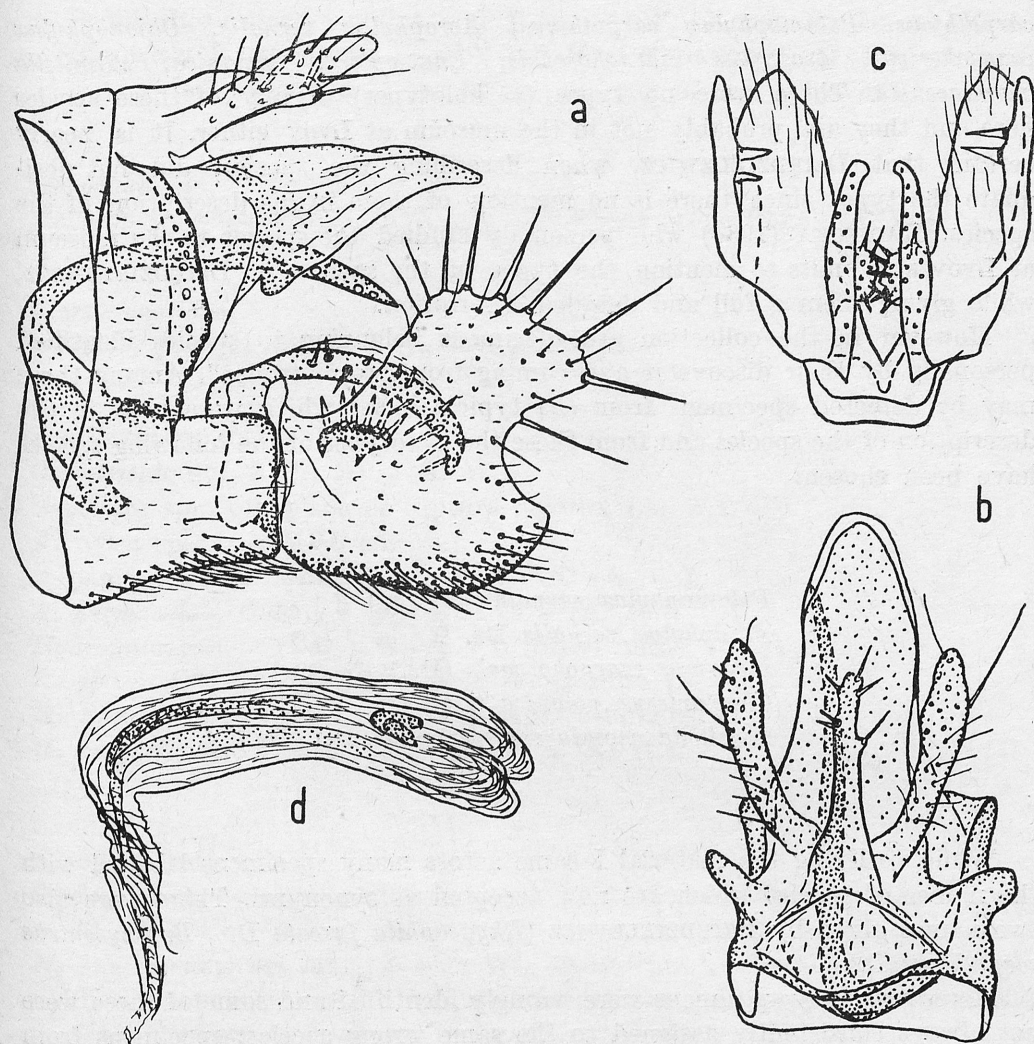


Fig. 20. *Triaenodes simulans* TJED., genitalia ♂; a — lateral view; b — dorsal view; c — inferior appendages, dorsal view; d — aedeagus, lateral view

#### *Odontoceridae*

*Odontocerum albicorne* (SCOP.), 10 ♂♂, 7 ♀♀; PU, EC, CF, WC.

#### *Molannidae*

*Molannodes tinctus* (ZETT.), 6 ♂♂, 2 ♀♀; PU, EC (Mikuliczyn), Tatras; a male from Mikuliczyn and 4 ♂♂ from the Tatras were labelled as "*Molannodes zelleri* McL."

The most interesting part of the collection of DZIEDZIELEWICZ is the series of specimens belonging to the species which were described by him: *Drusus*



*carpathicus*, *Potamophylax carpathicus*, *Acrophylax vernalis*, *Chionophylax czarnohoricus*, *Isogamus czarnohorensis*, *Chaeopteryx polonica*, *Annitella chomiacensis*. There were no types (= holotypes) of any of these species here and they are probably not in the museum at Lvov either. It is nearly certain that DZIĘDZIELEWICZ, when describing the species, did not designate the type, since there is no mention of them in his description of the species. RACIĘCKA (1934) who personally studied the species in the museum at Lvov also omits to mention the types of the species of DZIĘDZIELEWICZ, while giving them a full and detailed description.

However in the collection are specimens belonging to species identified personally by their discoverer and coming from "terra typica". Among these may be detected specimens from the typical series which were used in the description of the species and from these the lectotypes of the following species have been chosen:

*Potamophylax carpathicus* (Dz.) ♂  
*Acrophylax vernalis* Dz. ♀  
*Isogamus czarnohorensis* (Dz.) ♂  
*Chaeopteryx polonica* (Dz.) ♂  
*Annitella chomiacensis chomiacensis* (Dz.) ♂

While verifying the material I came across many specimens labelled with the names of species which are now accepted as synonyms. There were also two names given by DZIĘDZIELEWICZ (*Rhyacophila furcata* Dz., *Brachycentrus carpathicus* Dz.).

Moreover many specimens were wrongly identified and some of these were not always consistently assigned to the same wrong species; specimens from the same species appeared under several different names. These species are arranged in a table (Tab. 1) with the exception of those wrongly identified and which DZIĘDZIELEWICZ (1919, 1920) corrected in his publications.

The verification of the caddis-flies of DZIĘDZIELEWICZ deposited in Cracow, do not clear up all doubts as to their identification by the collector. Many doubts about the published identifications may be cleared up only by the verification of this collection deposited in the museum in Lwów.

However in some cases it is possible to establish an error in the identification of a species quite definitely. That is for the species of which all the specimens identified by DZIĘDZIELEWICZ were deposited together at Cracow (DZIĘDZIELEWICZ 1919, 1920). Wrongly published species are: *Rhyacophila torrentium* PICT. for the Tatras, *Hydroptila sparsa* CURT. for the Sądecki Beskid (near Rytro) and *Apatania wallengreni* McL. for the Tatras.

B. Caddis-flies collections of: Antoni WAGA (A. W.), Konstanty JELSKI (K. J.), Stanisław KAMIENIECKI (S. K.), and Józef FUDAKOWSKI (J. F.); specimens not registered in the inventory book of the collections

### *Rhyacophilidae*

*Rhyacophila pascoei* McL., 1 ♂, 1 ♀; "in Rheno prope Bonn" (A. W.).

### *Glossosomatidae*

*Agapetus fuscipes* CURT., 1 ♂, WC (A. W.).

### *Hydroptilidae*

*Orthotrichia* sp., 2 ♀♀; MPL (A. W.).

*Oxyethira* sp., 1 ♀; place of capture unknown (A. W.).

*Agraylea* sp., 1 ♀; MPL (A. W.).

*A. multipunctata* CURT., 8 ♂♂, 1 ♀; CCU (A. W.).

*A. sexmaculata* CURT., 4 ♂♂, 1 ♀; CCU (A. W.).

*Hydroptila occulta* (EAT.), 2 ♀♀; WC (Szczawnica), (A. W.).

*H. sparsa* CURT., 1 ♂; Lelów near Włoszczowa (A. W.).

*H. tineoides* DALM., 1 ♂; place of capture unknown (A. W.).

*H. vectis* CURT., 4 ♂♂, 1 ♀; CCU, MPL (A. W.).

### *Hydropsychidae*

*Hydropsyche angustipennis* (CURT.), 4 ♂♂, 1 ♀; vicinity of Cracow (K. J.), CCU (A. W.).

*H. bulgaromanorum* MAL., 2 ♂♂; WC (Szczawnica), Danube River (A. W.).  
This is a new species for the Polish fauna. The genital structure of the male from Szczawnica is shown in fig. 21.

*H. contubernalis masovica* MAL., 1 ♂; MPL (on the Vistula in Warsaw) (A. W.).  
This subspecies was recently added to the list of Polish caddis-flies (MALICKY 1977).

*H. ornatula* McL., 2 ♂♂, 1 ♀; WC (Szczawnica, det. MALICKY), CCU (Krzeszowice, det. JELSKI, ver. MALICKY), (A. W.).

*H. saxonica* McL., 1 ♂; CCU (A. W.).

*Hydropsyche* spp., 3 ♀♀; CCU, MPL (A. W.).

### *Polycentropodidae*

*Neureclipsis bimaculata* (L.), 2 ♂♂, 1 ♀; MPL, Danube River, (A. W.).

*Polycentropus schmidi* NOVAK et BOTS., 1 ♂; WC (Szczawnica), (A. W.).

*Holocentropus picicornis* STEPH., 1 ♀; CCU (A. W.).

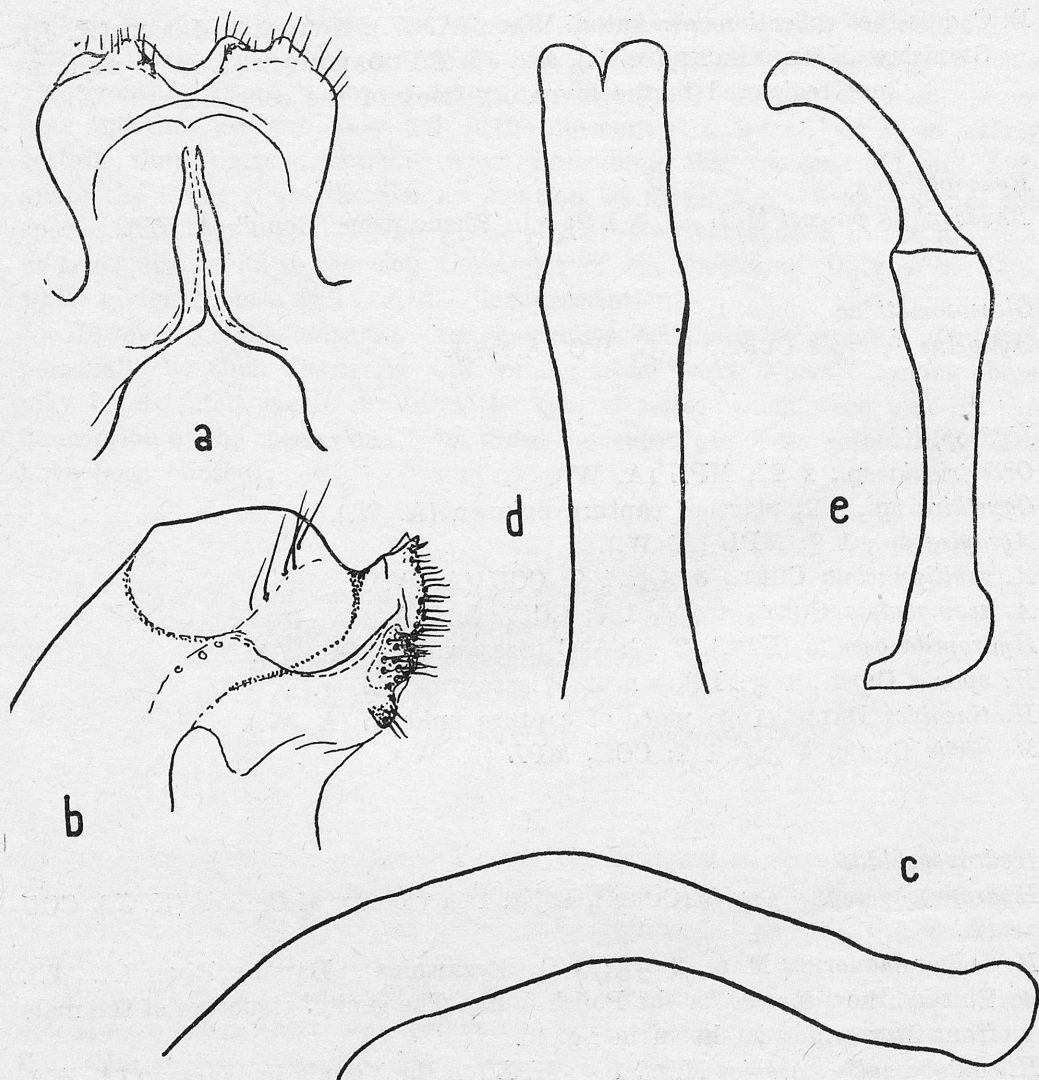


Fig. 21. *Hydropsyche bulgaromanorum* MAL., genitalia ♂; a, b — segments 9—10, dorsal and lateral views; c — aedeagus, lateral view; d — aedeagus (further enlarged) ventral view; e — inferior left appendage

*Cyrnus crenaticornis* (KOL.), 5 ♂♂, 5 ♀♀; CCU, MPL (A. W.).  
*C. flavidus* McL., 1 ♂; CCU (A. W.).

#### *Psychomyidae*

*Psychomyia pusilla* (FABR.), 3 ♂♂, 2 ♀♀; WC, CCU (A. W.).  
*Lype phaeopa* (STEPH.), 1 ♀; CCU (A. W.).  
*L. reducta* (HAG.), 1 ♂; MPL (A. W.).



*Ecnomidae*

*Ecnomus tenellus* (RAMB.), 3 ♂♂, 6 ♀♀; CCU, MPL (A. W.).

*Phryganeidae*

*Trichostegia minor* (CURT.), 1 ♀; CCU (A. W.).

*Agrypnia obsoleta* Hagen, 2 ♂♂, 2 ♀♀; CCU, MPL (A. W.).

*A. pagetana* CURT., 1 ♂; MPL (A. W.).

*Oligotrichia striata* (L.), 2 ♀♀; CCU (A. W.).

*Oligostomis reticulata* (L.), 4 ♂♂; PU (S. K.).

*Semblis phalenoides* (L.), 1 ♀; place of capture unknown (A. W.).

*Brachycentridae*

*Brachycentrus subnubilus* CURT., 2 ♂♂, 1 ♀; CCU, MPL (A. W.).

*Oligopteryx maculatum* (FOURCR.), 2 ♂♂, 1 ♀; WC (A. W.).

*Limnephilidae*

*Drusus trifidus* McL., 6 ♂♂; CCU (A. W.).

*Limnephilus binotatus* CURT., 3 ♂♂, 2 ♀♀; PU (S. K.), CCU (A. W.).

*L. bipunctatus* CURT., 1 ♀; CCU (A. W.).

*L. extricatus* McL., 1 ♀; PU (S. K.).

*L. flavicornis* (FABR.), 1 ♂; CCU (A. W.).

*L. fuscicornis* RAMB., 1 ♂; MPL (A. W.).

*L. griseus* (L.), 1 ♂, 12 ♀♀; PU (S. K.), vicinity of Cracow (K. J.), CCU, MPL (A. W.).

*L. ignavus* McL., 1 ♀; CCU (A. W.).

*L. lunatus* CURT., 2 ♂♂; PU (S. K.), CCU (A. W.).

*L. nigriceps* (ZETT.), 1 ♂; MPL (A. W.).

*L. rhombicus* (L.), 1 ♂; CCU (A. W.).

*L. sparsus* CURT., 1 ♀; WC (A. W.).

*L. vitattus* (FABR.), 3 ♂♂, 2 ♀♀; vicinity of Cracow (K. J.), CCU, MPL (A. W.).

*Colpotaulius incisus* (CURT.), 1 ♂, 2 ♀♀; CCU (A. W.).

*Grammotaulius nitidus* (MULL.), 1 ♂, 1 ♀?; PU (S. K.).

*Nemotaulius punctatolineatus* (RETZ.), 1 ♂; CCU (A. W.).

*Anabolia furcata* BRAU., 10 ♂♂, 2 ♀♀; vicinity of Cracow (J. F.), CCU (A. W.).

*Potamophylax rotundipennis* (BRAU.), 8 ♂♂, 12 ♀♀; WC, vicinity of Cracow (K. J.).

*Halesus digitatus* (SCHRK.), 1 ♂; CCU (A. W.).

*H. tessellatus* (RAMB.), 4 ♀♀; vicinity of Cracow (J. F.), MPL (A. W.).

*Isogamus czarnohorensis* (DZ.), 1 ♀; EC (Czarnohora), (J. F.).

*Stenophylax permistus* McL., 1 ♂; CCU (A. W.).

*Chaetopteryx villosa* (FABR.), 1 ♂, 2 ♀♀; MPL (A. W.).

*Lepidostomatidae*

*Lepidostoma hirtum* (FABR.), 1 ♀; WC (A. W.).

*Lasiocephala basalis* (KOL.), 4 ♂♂, 1 ♀; WC, CCU, MPL (A. W.).

Table I

List of caddis-flies (*Trichoptera*) wrongly identified and deposited by J. DZIĘDZIELEWICZ in the Museum of Polish Academy of Sciences (PAU) in Cracow (now the collections of the Institute of Systematic and Experimental Zoology, PAS in Cracow)

DZIĘDZIELEWICZ identification	Number of specimens				Correct identification
	♂♂♀♀	♂♂♀♀	♂♂♀♀	♂♂♀♀	
1	2	3	4	5	6
<i>aequalis</i> KLAP., <i>Anisogamus</i>	9	5	9	4	<i>Isogamus aequalis</i> KLAP., <i>I. czarnohorensis</i> Dz.
<i>albifrons</i> L., <i>Leptocerus</i>	1	1	1	1	<i>Athripsodes commutatus</i> ROST.
<i>albimacula</i> RAMB., <i>Leptocerus</i>	1		1		<i>Ceraclea ramburi</i> MORSE
<i>alpestris</i> KOL., <i>Stenophylax</i>	5	11	5	10	<i>Rhadicleptus alpestris sylvanocarpa-</i> <i>thicus</i> BOTS., RIEDEL, <i>Limnephilus dispar</i> McL.
<i>bicolor</i> CURT., <i>Triaenodes</i>	3		1		<i>T. bicolor</i> CURT., <i>T. simulans</i> TJED.
<i>boltoni</i> CURT. (sensu McL.), <i>Glossosoma</i>	5	6	3	2	<i>G. boltoni</i> CURT. (nec McL.), <i>G. conformis</i> NEBOISS
<i>carpathicus</i> Dz., <i>Brachycentrus</i>	1		1		<i>B. subnubilus</i> CURT.
<i>comatus</i> PICT., <i>Agapetus</i>	6	7	3	4	<i>A. ochripes</i> CURT., <i>A. rectigonopoda</i> BOTS., <i>A. delicatulus</i> McL., <i>A. laniger</i> (PICT.)
<i>concentricus</i> ZETT. (sensu McL.), <i>Stenophylax</i>	2	1		1	<i>S. permistus</i> McL., <i>S. speluncarum</i> McL., <i>Micropterna lateralis</i> (STEPH.)
<i>conspersa</i> RAMB., <i>Triaenodes</i>	1		1		<i>T. simulans</i> TJED.
<i>copiosus</i> McL., <i>Dolophilus</i>	7	4	2	2	<i>Wormaldia copiosa</i> McL., <i>W. occipitalis</i> (PICT.), <i>W. pulla</i> (McL.)
<i>delicatulus</i> McL., <i>Agapetus</i>	3	1	1	1	<i>A. delicatulus</i> McL., <i>A. ochripes</i> CURT.
<i>destitutus</i> KOL., <i>Drusus</i>	1		1		<i>D. discolor</i> (RAMB.)
<i>exocellata</i> DUF., <i>Hydropsyche</i>	2		2		<i>H. dissimulata</i> KUM., BOTS.
<i>extricatus</i> McL., <i>Limnophilus</i>	7	7	6	7	<i>Limnephilus extricatus</i> McL., <i>L. dispar</i> McL.
<i>femoralis</i> EAT., <i>Hydroptila</i>	1	2	1	2	<i>H. occulta</i> (EAT.)
<i>flavomaculatus</i> PICT., <i>Polycentropus</i>	2		1		<i>P. schmidi</i> BOTS., NOVAK, <i>Cyrrnus flavidus</i> McL.
<i>fulvipes</i> CURT., <i>Hydropsyche</i>	14		14		<i>H. pellucidula</i> (CURT.)

1	2	3	4	5	6
<i>grandis</i> L., <i>Phryganea</i>	1		1		<i>P. bipunctata</i> RETZ.
<i>griseus</i> L., <i>Limnophilus</i>	9	16	9	14	<i>Limnophilus griseus</i> (L.), <i>L. sericeus</i> (Say), <i>L. stigma</i> CURT.
<i>guttata</i> PICT., <i>Hydropsyche</i>	8		1 1 4		<i>H. angustipennis</i> (CURT.), <i>H. bulbifera</i> McL., <i>H. contubernalis</i> McL.
<i>hirsutus</i> PICT., <i>Limnophilus</i>	1	1	1	1	<i>Limnophilus extricatus</i> McL.
<i>hirticornis</i> McL., <i>Rhyacophila</i>	2		2		<i>R. philopotamoides orentis</i> SCHMID
<i>intermedia</i> McL., <i>Rhyacophila</i>	2	2	2	1	<i>R. fasciata</i> HAG., <i>R. philopotamoides orentis</i> SCHMID
<i>lacustris</i> PICT., <i>Oecetis</i>	1		1		<i>O. furva</i> (RAMB.)
<i>laniger</i> PICT., <i>Agapetus</i>		1		1	<i>A. delicatulus</i> McL.
<i>latipennis</i> CURT. (sensu McL.), <i>Stenophylax</i>	6		6		<i>Potamophylax latipennis</i> (CURT.), (nec McL.)
<i>lurida</i> CURT., <i>Tinodes</i>	2		2		<i>Wormaldia pulla</i> (McL.)
<i>maior</i> McL., <i>Chaetopteryx</i>	1	1	1	1	<i>C. polonica</i> Dz., <i>C. subradiata</i> KLAP.
<i>mendax</i> McL., <i>Halesus</i>	2	1	2	1	<i>H. rubricollis</i> (PICT.)
<i>meridiana</i> McL., <i>Apatania</i>	13	4	13	4	<i>A. carpathica</i> SCHMID
<i>millenii</i> KLAP., <i>Stenophylax</i>	4	2	4	2	<i>Potamophylax carpathicus</i> (Dz.), <i>Isogamus czarnohorensis</i> (Dz.)
<i>mixtus</i> PICT., <i>Drusus</i>	1	1	1	1	<i>D. biguttatus</i> (PICT.)
<i>multiguttatus</i> CURT., <i>Polycentropus</i>	11		2 9		<i>P. irroratus</i> CURT., <i>P. flavomaculatus</i> (PICT.)
<i>niger</i> HAG., <i>Lithax</i>	4		3 1		<i>L. niger</i> HAG., <i>L. obscurus</i> (HAG.)
<i>pactus</i> McL., <i>Agapetus</i>	3	2	1 1 1	2	<i>A. laniger</i> (PICT.), <i>A. delicatulus</i> McL., <i>Synagapetus armatus</i> (McL.)
<i>pallidula</i> McL., <i>Tinodes</i>		1		1	<i>Lype phaeopa</i> (STEPH.)
<i>pallipes</i> FABR., <i>Silo</i>	5	6	3 1 1	3 2 1	<i>S. pallipes</i> (FABR.), <i>S. graellsii</i> ED. PICT., <i>S. piceus</i> (BRAU.)
<i>piceus</i> BRAU., <i>Silo</i>	11	4	10 1	3 1	<i>S. piceus</i> (BRAU.) <i>S. graellsii</i> ED. PICT.
<i>psorosa</i> KOL., <i>Psilopteryx</i>	7	4	7	4	<i>P. psorosa carpathica</i> SCHMID
<i>pulchricornis</i> PICT., <i>Hydroptila</i>	1		1		<i>H. occulta</i> (EAT.)
<i>sequax</i> McL., <i>Micropterna</i>		1		1	<i>M. lateralis</i> (STEPH.)
<i>sparsa</i> CURT., <i>Hydroptila</i>		2		2	<i>H. forcipata</i> (EAT.)
<i>subnigra</i> McL., <i>Wormaldia</i>	1		1		<i>W. occipitalis</i> (PICT.)
<i>sudetica</i> KOL., <i>Peltostomis</i>	5	2	5	2	<i>Ecclisopteryx dalecarlica</i> KOL.
<i>torrentium</i> PICT., <i>Rhyacophila</i>	1	1	1	1	<i>R. mocsaryi</i> KLAP., <i>R. vulgaris</i> PICT.



1	2	3	4	5	6
<i>triangulifera</i> McL., <i>Wormaldia</i>	7		7		<i>W. occipitalis</i> (Pict.)
<i>villosa</i> Fabr., <i>Chaetopteryx</i>	6	3	4	3	<i>C. villosa</i> (Fabr.), <i>C. fusca</i> Brau., <i>C. sahlbergi</i> McL.
<i>wallengreni</i> McL., <i>Apatania</i>	3		3		<i>A. fimbriata</i> (Pict.)

### Leptoceridae

- Athripsodes albifrons* (L.), 1 ♂; CCU (A. W.).  
*A. aterrimus* (Steph.), 1 ♂, 1 ♀; CCU, MPL (A. W.).  
*Ceraclea fulvus* (Ramb.), 2 ♀♀; PU (S. K.), MPL (A. W.).  
*C. senilis* (Burm.), 1 ♀; PU (S. K.).  
*Mystacides azurea* (L.), 1 ♂, 3 ♀♀; WC (A. W.).  
*M. longicornis* (L.), 3 ♂♂, 2 ♀♀; CCU, MPL (A. W.).  
*M. nigra* (L.), 3 ♂♂, 2 ♀♀; WC, CCU (A. W.).  
*Oecetis furva* (Ramb.), 1 ♀; MPL (A. W.).  
*O. lacustris* (Pict.), 1 ♀; MPL (A. W.).  
*O. ochracea* (Curt.), 4 ♂♂, 3 ♀♀; PU (S. K.), WC, CCU, MPL (A. W.).

### Sericostomatidae

- Notidobia ciliaris* (L.), 1 ♂; CCU (A. W.).  
*Sericostoma personatum* (Spence), 2 ♂♂; CCU (A. W.).  
*S. flavicorne* Schen., 1 ♂; MPL (A. W.).  
*Sericostoma* spp., 1 ♀; CCU (A. W.).

### Beraeidae

- Beraea pullata* (Curt.), 1 ♀; MPL (A. W.).

### Molannidae

- Molanna angustata* Curt., 1 ♂, 1 ♀; MPL (A. W.).

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## STRESZCZENIE

Opracowano zbiory chruścików (*Trichoptera*) — imagines w stanie suchym — Zakładu Zoologii Systematycznej i Doświadczalnej Polskiej Akademii Nauk w Krakowie. Prace obejmowały weryfikację oznaczeń gatunków w kolekcji

J. DZIĘDZIELEWICZA oraz oznaczenie dotąd nie opracowanych zbiorów innych kolekcjonerów m. in. A. WAGI z połowy ubiegłego wieku.

Kolekcja DZIĘDZIELEWICZA, powstała w latach 1875—1912, obejmuje około 1300 okazów należących do 166 gatunków, zebranych głównie w Karpatach Wschodnich i Zachodnich, a także na Podkarpaciu ukraińskim i w południowej części Roztocza. Kolekcja ta zawiera okazy wszystkich gatunków opisanych przez DZIĘDZIELEWICZA i oznaczonych przez niego osobiście. Wśród nich wyszukano okazy serii typowych (na podstawie których Dziędzielewicz opisał nowo odkryte gatunki) i wyznaczono lektotypy: *Potampohylax carpathicus*, *Acrophylax vernalis*, *Isogamus czarnohorensis*, *Chaetopteryx polonica* i *Annitella chomiensis*. Dokonano opisu i zobrazowano rycinami *I. czarnohorensis*, nadając mu rangę gatunku.

Zestawiono (Tab. 1) zdezaktualizowane i błędne oznaczenia chrzączków dokonane przez DZIĘDZIELEWICZA.

Nie opracowane materiały chrzączków zawierały około 220 okazów należących do 72 gatunków zebranych przez A. WAGĘ w Beskidach Zachodnich, na Wyżynie Krakowsko-Częstochowskiej i Nizinie Mazowiecko-Podlaskiej; K. JELSKIEGO w okolicy Krakowa; S. KAMIENIECKIEGO na Wyżynie Podolskiej; J. FUDAKOWSKIEGO na Czarnohorze w Karpatach Wschodnich i w okolicy Krakowa.

W zbiorach chrzączków Zakładu Zoologii Systematycznej i Doświadczalnej PAN znaleziono dwa nowe gatunki dla fauny Polski, zebrane w Beskidach Zachodnich: *Hydropsyche bulgaromanorum* MAL. (w Szczawnicy w Pieninach) i *Triaenodes simulans* TJED. (okolice Myślenic).

Redaktor pracy: doc. dr A. Szeptycki