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A review of the Chalcidoid fauna of the Moldavian S. S. R., with descriptions of new species (Hymenoptera)

by

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The Moldavian Soviet Socialistic Republic spreads mainly between two rivers: the Prut and the Dniestr in the south-west of the European part of the USSR. The territory is better known to most students under a previous name, Bessarabia. It is mostly a lowland country the highest hills of which do not much exceed 400 m. above sea level (the outskirts of the Carpathians). The climate is predominantly continental, with dry and warm weather throughout the summer, as in the neighbouring Ukraine. Only about 6.4 percent of the territory is covered by forests of deciduous trees, whilst conifers are completely lacking. Also birch (*Betula*) is rare and, together with beech (*Fagus*), confined only to the northernmost part. Another striking feature is relative sparsity of willows, which again reduces the number of insects. The main components of the woods called "kodry" in central and northern Moldavia, are mainly *Quercus* and *Carpinus*, mixed with some other trees, in particular with *Ulmus*, *Tilia*, *Fraxinus*, *Acer*, *Prunus*, and with bushy undergrowth of *Corylus*, *Cornus*, *Euonymus*, *Crataegus*, etc., but only with poor grass and almost without ferns. Along the Prut and the Dniestr rivers small woods of poplars, willows, elms and ash trees occur. Once mainly a steppe, Moldavia is otherwise now a country of cultivated land, of fields, and orchards, and of pastures mostly confined to the slopes. Only a very small percentage of land has been left uncultivated, so that the ancient steppe flora and fauna are restricted to small areas on some slopes, at wood edges, along roads, etc.

The investigation of the fauna of Chalcidoidea of Moldavia has been started only recently, in connection with a study of the possibilities of how to exploit the natural enemies of the orchard pests in biological control. This project is being carried on by Dr. V. I. Talitzki in the Moldavian Institute of Orchard and Vineyard Crops, and the present author collaborates with the Moldavian group in identifying the reared parasite material as well as collected material of Chalcidoidea and in supplying data on the ascertained species. With this opportunity the author has

taken an interest also in a faunistic investigation of Chalcidoidea of the country in general.

The present paper presents a summary of the known species of Chalcidoidea of Moldavia. About half of these species, apart from several other species described or mentioned occasionally elsewhere (e.g. Bouček, 1963, 1964a, 1964b, 1965a), have already been treated, in a different way, in a major contribution published four years ago (Bouček, 1961b). Similar notes are being published now in the same Moldavian journal in Kishinev (Bouček, 1965b) on another lot of Moldavian Chalcidoids. Both these papers are in Russian. They contain mainly data on the distribution of each species in Moldavia, data on the bionomics, particularly the known host relations, and data on the distribution of the species in question in general. Much of this is published there for the first time, including records of many species from Czechoslovakia and from some other countries. The paper of 1961 includes also a description of *Cirrospilus talitzkii* (given also in English) and of the then unknown male of *Danuviella subplana* Erdős. In the second paper no new species is being described.

It is felt that it is useful to have a review of the species ascertained even if the list is still far from being complete. So far it has been possible to identify only about half of the species actually reared or collected by other means in this small east-European country during the few years of the recent investigations.

List of the species ascertained

LEUCOSPIDIDAE

Leucospis dorsigera Fabr.

CHALCIDIDAE

Belaspida obscura Masi
Neochalcis fertoni (Kieff.)
Haltichella rufipes (Oliv.)
Hockeria magna Bčk.
H. susterai Bčk.
H. unicolor Walk.
Invreia rufitarsis (Illig.)
I. subarmata (Först.)
Euchalcidia nigripes (Fonsc.)
Lasiochalcidia dargelasi (Latr.)
Dirhinus hesperidum (Rossi)
Brachymeria femorata (Panz.)

B. intermedia (Nees)
B. rugulosa (Först.)
B. secundaria (Rusch.)
B. inermis (Fonsc.)
B. vitripennis (Först.)
B. moerens (Rusch.)
B. coloradensis (Cress.)
B. walkeri (D. Torre)
B. minuta (L.)
Chalcis sispes [L.]
**Ch. biguttata* Spin.

TORYMIDAE

Podagrion bellator (Dalm.)
Torymus (Syntomaspis) cyaneus Boh.
T. (S.) druparum Boh.
T. (Torymus) arundinis (Walk.)
T. (T.) erucarum (Schrank)
T. (T.) nobilis Boh.

T. (T.) ventralis (Fonsc.)
T. (T.) abdominalis Boh.
T. (T.) nigricornis Boh.
T. (T.) pleuralis Thoms.
T. (T.) spilopterus Boh.
T. (T.) macropterus Boh.

* The species marked with an asterisk have been ascertained in the adjacent areas of Moldavia, in the Ukraine, near the Dniestr Liman, W. and SW. of Odessa, but not directly on the territory of Moldavia.

Diomorus cupreus (Spin.)
D. calcaratus (Nees)
Pseudotorymus papaveris (Thoms.)
P. sapphyrinus (Fonsc.)
Dimeromicrus kiesenwetteri (Mayr)
Liodontomerus budensis Erd.
L. papaveris (Först.)
L. terebrator [Masi]
Lochimerus balasi [Szelényi]
Eridontomerus arrabonicus Erd.
E. biroi Rusch.
E. rufipes Erd.

E. laticornis (Först.)
Didactyliocerus dispar Masi
Paraholaspis cothurnata Masi
Exopristus trigonomerus (Masi)
Ameromicrus violaceus Nik.
Glyphomerus tibialis Först.
Monodontomerus aereus Walk.
M. obscurus Westw.
M. minor [Ratz.]
M. viciellae Först.
Megastigmus dorsalis (Fabr.)
M. aculeatus (Swed.)

ORMYRIDAE

Ormyrus (O.) hungaricus Erd.
O. (O.) punctiger Westw.

O. (Tribaeus) diffinis (Fonsc.)

EURYTOMIDAE

Archirileya inopinata Silv.
Tetramesa aciculata (Hed.)
Eudecatoma stagnalis (Erd.)
E. mellea [Curtis]
E. mayri Erd.
E. submutica (Thoms.)
E. biguttata [Swed.]
Eurytoma (E.) nodularis Boh.
E. (E.) robusta Mayr
E. (E.) curta Walk.

E. (E.) schreineri Schreiner
E. (E.) strigifrons auct. (a n. sp.?)
E. (E.) verticillata [Fabr.]
E. (E.) serratae [Fabr.]
E. (E.) morio Boh.
E. (E.) aspilus (Walker)
E. (Bruchophagus) coluteae Bčk.
Systole albipennis Walk.
S. coriandri Nik.
Nikanoria metallica (Erd.)

PERILAMPIDAE

Chrysolampus splendidulus (Spin.)
Ch. shurik [Nik.]
Ch. thenae [Walk.]
Perilampus aeneus (Rossi)
P. auratus (Panzer)

P. laevifrons Dalm.
P. masculinus Bčk.
P. tristis Mayr
P. neglectus Bčk.

EUCHARITIDAE

Stilbula cyniformis (Rossi)

PTEROMALIDAE

Spalangia cameroni Perkins
S. nigra Latr.
S. erythromera Först.
S. subpunctata Först.
S. fuscipes Nees
Cerocephala cornigera auct.
Spalangiopelta alata Bčk.
S. dudichi Erd.
Cea pulicaris Walk.
Dipara petiolata Walk.
Netomocera setifera Bčk.
Neodipara perbella Erd.
Asaphes vulgaris Walk.
Pannoniella sexramosa (Erd.)
Heydenia pretiosa Först.
Colotrechnus viridis [Masi]
Microgaster maculata Walk.
M. rufipes Walk.

Seladerma laetum Walk.
S. pschorni [Del.]
Bugacia arenaria Erd.
Gastrancistrus fuscicornis Walk.
Systasis encyrtoides Walk.
Pirene graminea Hal.
Eunotus cretaceus Walk.
Scutellista obscura [Först.]
Gastracanthus pulcherrimus Westw.
Trigonoderus cyanescens [Först.]
T princeps Westw.
Plutothrix scenicus [Walk.]
P. trifasciatus [Thoms.]
Platygerrhus ductilis [Walk.]
Cyrtogaster vulgaris Walk.
Polycystus clavicornis [Walk.]
Sphegigaster pallicornis Spin.
S. cuscutae Ferr.

S. aculeata (Walk.)
S. truncata Thoms.
S. stepicola n. sp.
Syntomopus thoracicus Walk.
Coruna clavata Walk.
**Panstenon agylla* (Walk.)
P. oxylyus Walk.
Schimitschekia populi n. g. n. sp.
Thinodytes cyzicus (Walk.)
Halticoptera aenea (Walk.)
H. circulus (Walk.)
Halticopterina triannullata Erd.
Platecrizotes europaeus Bök.
Pachycrepoideus vindemiae (Rond.)
Pachyneuron grande Thoms.
P. umbratum Del.
P. aeneum Masi
P. cremifaniae Del.
P. planiscuta Thoms.
P. solitarium (Hartig) [= *coccorum* auct.]
P. aphidis (Bouché)
Vrestovia fidenas (Walk.)
Cheiropachus colon (L.)
Acrocormus semifasciatus Thoms.
Rhaphitelus maculatus Walk.
Hemitrichus seniculus (Nees)
H. oxygaster n. sp.
Lariophagus fimbriatus n. sp.
Anisopteromalus calandrae (How.)
Caenocrepis arenicola (Thoms.)
Dinarmus acutus (Thoms.)
Picroscytoides cerasiops Masi
Norbanus scabriculus (Nees)
Homoporus chalcidiphagus (Wlsh. et Ril.)
H. apharetus (Walk.)
H. destructor (Say)
H. luniger (Nees)
H. subniger (Walk.)
H. bicolor (Erd.)
H. pulchripes Erd.
H. arestor (Walk.)
H. fulviventris (Walk.)
H. gibbiscuta Thoms.
H. ludensis Erd.
H. laeviusculus Erd.
Merisus splendidus Walk.
M. flagellatus n. sp.
Callitula bicolor Spin.
C. ferrierei Bök.
Caenacis divisa (Walk.)
Holcaeus calligetis (Walk.)
Ablaxia crassicornis (Thoms.)
A. squamifera (Thoms.)
Aggelma agrilli n. sp.
Heteroprymna longicornis (Walk.)
Apsilocera verticillata Bök.
**Stinoplus militaris* (Thoms.)
S. pervasus (Walk.)
Spintherus dubius (Nees)
Lampoterma viride (Thoms.)
Eupteromalus hemipterus (Walk.)
Urolepis maritima (Walk.)
Halomalus crucifer Erd.
Gbelcia crassiceps Bök.
Rohatina inermis Bök.
Pezilepsis dentifer (Thoms.)
Rakosina deplanata Bök.
Erythromalus nubilipennis (Walk.)
Arthrolytus ocellus (Walk.)
A. maculipennis (Walk.)
Meraporus graminicola Walk.
Trichomalus campestris (Walk.)
T. bracteatus (Walk.)
T. nanus (Walk.)
Peridesmia discus (Walk.)
Mesopolobus (Ahlbergiella) aequus (Walk.)
M. (Mesopolobus) diffinis (Walk.)
M. (M.) fuscipes (Walk.)
M. (M.) xanthocerus (Thoms.)
M. (M.) tibialis (Westw.)
M. (M.) fasciiventris Westw.
**M. (M.) phragmitis* (Erd.)
M. (M.) nobilis (Walk.)
M. (M.) laticornis (Walk.)
M. (Xenocrepis) incultus (Walk.)
M. (X.) morys (Walk.)
Sturovia squamifera (Thoms.)
Isocyrtus laetus Walk.
Stenomalina muscarum (L.)
S. continua (Walk.) [= *rugosa* Thoms.]
S. micans (Oliv.)
S. dives (Walk.) [= *crassicornis* Thoms.]
S. epistenus (Walk.) [= *subjumata* Thoms.]
Habrocytus elevatus (Walk.)
H. albipennis (Walk.)
H. chrysos (Walk.) [= *acutigena* Thoms.]
H. semotus (Walk.)
H. grandis (Walk.)
H. ariomedes (Walk.)
H. platyphilus (Walk.) [= *amplissimus* Dalla Torre]
H. altus (Walk.)
Pteromalus puparum (L.)
P. bifoveolatus Först.
Psychophagus omnivorus (Walk.)
Pseudocatolaceus thoracicus (Walk.)
 [= *euryops* Först.]
Catolaccus ater (Ratz.)
Kaleva corynocera Grah.
Tomicobia promulus (Walk.)
Stichocrepis armata Först.
Cyclogastrella deplanata (Nees)
C. clypealis n. sp.
Muscidiſurax raptor Grt. et Saund.
Dibrachys cavus Walk.
D. saltans (Ratz.)
D. hians n. sp.
Dibrachoides dynastes (Först.)
Kranophorus extentus (Walk.)
Conomorium patulum (Walk.)
Schizonotus sieboldi (Ratz.)

EUELMIDAE

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| <i>Calosota lixobia</i> Erd. | <i>E. cavifrons</i> n. sp. |
| <i>Eupelmus linearis</i> Först. | <i>Macroneura vesicularis</i> (Retz.) |
| <i>E. popa</i> Girault (= <i>zangherii</i> Masi) | <i>M. falcata</i> (Nik.) |
| <i>E. atropurpureus</i> Dalm. | <i>Merostenus excavatus</i> (Dalm.) |
| * <i>E. stramineipes</i> Nik. | <i>Anastatus bifasciatus</i> (Fonsc.) |
| <i>E. tibicinis</i> Bčk. | <i>A. giraudi</i> (Ruschka) |
| <i>E. urozonus</i> Dalm. | <i>A. oscari</i> (Ruthe) |
| <i>E. spongipartus</i> Först. | <i>Metapelma nobile</i> (Först.) |
| <i>E. microzonus</i> Först. | |

ENCYRTIDAE

(mostly identified by V. I. Tryapitzin)

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| <i>Anusia nasicornis</i> Först. | <i>Encyrtus infidus</i> (Rossi) |
| <i>Leptomastix histrio</i> Mayr | <i>Paralitomastix varicornis</i> (Nees) |
| <i>Anagyrus pseudococci</i> (Grlt.) | <i>Cerchysius subplanus</i> (Dalm.) |
| <i>Metaphycus insidiosus</i> Merc. | <i>Homalotylus flaminus</i> (Dalm.) |
| <i>Blastothrix confusa</i> Erd. | <i>Isodromus vinulus</i> (Dalm.) |
| <i>Ceballosia dusmeti</i> Merc. | <i>I. puncticeps</i> (How.) |
| <i>Agentiaspis</i> (A.) <i>fuscicollis</i> (Dalm.) | <i>Choreia inepta</i> (Dalm.) |
| <i>A. (Holcothorax) testaceipes</i> (Ratz.) | <i>Monodiscodes intermedius</i> (Mayr) |
| <i>Microterys hortulanus</i> Erd. | <i>Discodes aeneus</i> (Dalm.) |
| <i>M. tessellatus</i> (Dalm.) | <i>Apterencyrtus microphagus</i> (Mayr) |
| <i>Trichomasthus albimanus</i> Thoms. | <i>Cerapterocerus mirabilis</i> Westw. |

TETRACAMPIDAE

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| <i>Platynocheilus cuprifrons</i> (Nees) | <i>F. erdoesi</i> Bčk. |
| <i>Tetracampe impressa</i> Först. | <i>Epiclerus nomocerus</i> (Masi) |
| <i>Foersterella flavipes</i> (Först.) | |

EULOPHIDAE

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| <i>Euplectrus bicolor</i> (Swed.) | <i>Danuviella subplana</i> Erd. |
| <i>E. cacoeciae</i> Ferr. | <i>Colpoclypeus florus</i> (Walk.) |
| <i>Euplectromorpha bouceki</i> Erd. | <i>Microlycus heterocerus</i> Thoms. |
| <i>Elachertus</i> (E.) <i>charondas</i> (Walker) | <i>M. virens</i> Erd. |
| <i>E. (E.) inunctus</i> (Nees) | <i>M. erdoesi</i> Bčk. |
| <i>E. (E.) pulcher</i> (Erdős) | <i>Necremnus leucarthros</i> (Nees) |
| <i>E. (E.) artaeus</i> (Walk.) | <i>N. folia</i> (Walk.) |
| <i>E. (Hyssopus) nigrifolius</i> (Zett.) | <i>N. artynes</i> (Walk.) |
| <i>Xanthellum transsylvanicum</i> Erd. | <i>N. hungaricus</i> (Erd.) |
| <i>Rhincopelte crassicornis</i> (Nees) | <i>Eulophus pennicornis</i> Nees |
| <i>Miotropis unipuncta</i> (Nees) | <i>E. larvarum</i> (L.) |
| <i>Aulogymnus gallarum</i> (L.) | <i>E. cyanescens</i> Bčk. |
| <i>A. skianeuros</i> (Ratz.) | <i>E. slovacus</i> Bčk. |
| <i>Cirrospilus elegantissimus</i> Westw. | <i>Dahlbominus fuscipennis</i> (Zett.) |
| <i>C. diallus</i> Walk. | <i>Sympiesis sericeicornis</i> (Nees) |
| <i>C. singa</i> Walk. | <i>S. acalle</i> (Walk.) |
| <i>C. pictus</i> (Nees) | <i>S. gordius</i> (Walk.) |
| <i>C. lynceus</i> Walk. | <i>S. viridula</i> (Thoms.) |
| <i>C. subviolaceus</i> Thoms. | <i>S. gregori</i> Bčk. |
| <i>C. pulcher</i> Masi | <i>S. flavopicta</i> Bčk. |
| <i>C. vittatus</i> Walk. | <i>S. sandanis</i> (Walk.) |
| <i>C. variegatus</i> (Masi) | <i>Ratzeburgiola cristata</i> (Ratz.) |
| <i>C. talitzkii</i> Bčk. | <i>Pnigalio pectinicornis</i> (L.) |
| <i>Diaulinopsis arenaria</i> (Erd. et Now.) | <i>P. mediterraneus</i> Ferr. et Del. |
| <i>Diglyphus isaea</i> (Walk.) | <i>P. soemius</i> (Walk.) |
| <i>D. crassinervis</i> Erd. | <i>P. phragmitis</i> (Erd.) |
| <i>D. pachyneurus</i> Grah. | <i>P. tricuspis</i> Erd. |
| <i>D. poppoea</i> (Walk.) | <i>Di cladoceris breviramulus</i> Bčk. |
| <i>D. albiscapus</i> Erd. | <i>Hemiptarsenus unguicellus</i> (Zett.) |

H. zilahisebessi Erd.
H. dropion (Walk.)
H. waterhousei Westw.
Cleolophus autonomus Merc.
Tetrastichus violaceus Kurdj.
T. heeringi Del.
T. coccinellae Kurdj.
T. sempronius Erd.
T. saji (Szelényi)
T. mones (Walk.)
T. upis (Walk.)
T. rhosaces (Walk.)
T. brevicornis (Panz.)
T. citrinus (Först.)
T. ecus (Walk.)
T. orchestidis Buk.
T. amethystinus (Ratz.)
T. evonymellae (Bouché)
T. neglectus Domenichini
T. bruchidii (Erd.)
T. oreophilus (Först.)
T. galactopus (Ratz. (= *rapo* auct.))
T. दौरа (Walk.)
T. szelenyi (Erd.)
T. percaudatus Silv.
T. crino (Walk.)
T. longulus (Erd.)
T. calamarius (Grah.)
Melittobia acasta (Walk.)
Crataepus marbis (Walk.)
Euderus brevicornis Bčk.
Euderus albitarsis (Zett.)
Euderastichus obscurus (Thoms.)
Entedon parvicar Thoms.
E. leucogramma (Ratz.)
E. biroi Erd.
E. leucocnemis Erd.
E. punctiscapus Thoms.
Mestocharis maculata (Först.)
Horismenus specularis (Erd.)
Pediobius flaviscapus (Thoms.)
P. moldavicus Bčk.
P. saulius (Walk.)
P. cothurnatus (Nees)
P. crassicornis (Thoms.)
P. purgo (Walk.)
P. obiusiceps Bčk.
P. phragmitis Bčk.
P. brachycerus (Thoms.)
P. facialis (Giraud)
P. epeus (Walk.)
P. cassidae Erd.
P. acantha (Walk.)
P. epigonus (Walk.)
P. eubius (Walk.) f. *alaspurus* (Walk.)
Holcopelte sulciscuta (Thoms.)
Derostenus gemmeus Westw.
Chrysocharis (Ch.) *albula* Del.
Ch. (Ch.) pubens Del.
Ch. (Ch.) idyia (Walk.)
Ch. (Ch.) pubicornis (Zett.)
Ch. (Ch.) phryne (Walk.)
Ch. (Ch.) polyzo (Walk.)
Ch. (Ch.) liriomyzae Del.
Ch. (Ch.) melaenis (Walk.)
Ch. (Ch.) amyite (Walk.)
Ch. (Ch.) cerris Erd.
Ch. (Kratochvilitana) submutica Grah.
Ch. (K.) nautias (Walk.)
Ch. (K.) pentheus (Walk.)
Ch. (K.) laomedon (Walk.)
Ch. (K.) prodice (Walk.)
Enaysma niveipes (Thoms.)
E. zwoelferi Del.
E. atys (Walk.)
Asecodes mento (Walk.)
A. coronis (Walk.)
Omphale navius (Walk.)
O. clypealis (Thoms.)
Desmatocharis turcica (Nees)
Achrysocharis lanassa (Walk.)
A. germanica (Erd.)
Achrysocharella formosa (Westw.)
A. ovulorum (Ratz.) (det. Nikolskaya)
Neochrysocharis albipes Kurdj.
N. nunbergi (Szczep.)
N. albiscapus Erd.
N. aratus (Walk.)
N. cuprifrons Erd.
Eugerium isander (Walk.)
Ionympha ochus (Walk.)
Metasecodes erxias (Walk.)
Closterocerus trifasciatus Westw.
Ceranisus menes (Walk.)
C. pacuvius Walk.
Euderomphale chelidonii Now. (i. 1.)

ELASMIDAE

Elasmus viridiceps Thoms.
E. westwoodi Gir. (det. Nikolskaya)
E. giraudi Ferr.
E. albipennis Thoms.
Euryischia inopinata Masi

THYSANIDAE

Signiphora (Signiphorina) subaenea (Först.)
S. (Xana) kurdjumovi (Nik.)
Thysanus ater Walk.

TRICHOGRAMMATIDAE

Lathromeroides bischoffi Nov.
Trachocera longicauda Bl. et Kryg.
Poropoea stollwerckii Först.
Ophioneurus signatus Ratz.
Trichogramma cacoeciae March.
 (det. Telenga)

MYMARIDAE

Parallelaptera panis Enock
Ooctonus vulgatus Hal.
Litus cynipseus Hal.

Erythmelus dichromocnemus Nov.
Mymar pulchellum Curtis
Stephanodes similis (Först.)

The list contains so far 1 species of Leucospididae, 23 species of Chalcididae, 36 species of Torymidae, 3 species of Ormyridae, 20 species of Eurytomidae, 9 species of Perilampidae, 1 species of Eucharitidae, 155 species of Pteromalidae, 17 species of Eupelmidae, 22 species of Encyrtidae, 5 species of Tetracampidae, 157 species of Eulophidae, 5 species of Elasmidae, 3 species of Thysanidae, 5 species of Trichogrammatidae and 6 species of Mymaridae. Of Encyrtidae only very few species have been mentioned; they were omitted after 1961 because Dr. V. I. Tryapitzin of Leningrad is going to publish an extensive paper on the Moldavian Encyrtidae independently. For a similar reason also Aphelinidae have been omitted, but even so and at the present rather poor state of knowledge the Moldavian list contains already no less than 468 species of Chalcid flies.

Many parasitic forms in general including the Chalcidoidea are poor subjects for zoogeographic conclusions. Most of the species have very wide distribution areas, which may be said almost certainly even about the lesser-known species. But nevertheless, some species certainly are much more restricted in distribution than others. In Moldavia it is e. g. one easterly species, *Ameromicrus violaceus* Nik., which is not yet known to occur farther to the west, apart from some new species, yet poorly known.

Many European species ascertained in the Moldavian SSR are southerly or south-easterly in distribution (from a Central-European point of view) and form a major component of the fauna, together with another large group, the forest elements. The former species usually do not reach Germany and Poland, their northernmost line of distribution being drawn through Czechoslovakia. Most of these species are usually called "Mediterranean elements", but it is to be admitted that species of very varied character have been attributed to this group. Some of them seem to be confined to the steppe and forest-steppe zones of Europe, spreading as a rule still much farther to the east. In Central Europe we call them usually "Pannonic" elements, probably incorrectly, because the Pannonic steppe (Hungarian Plain and adjacent territories) is only a small outskirts of the Eurasian steppe zone. The following Moldavian species belong to this group:

Lochimerus balasi (Szel.), *Eridontomerus rufipes* Erd., *Nikanoria metallica* Erd., *Chrysolampus shurik* (Nik.), *Colotrechnus viridis* (Masi), *Sphegigaster stepicola* Erd., some *Homoporus* spp., e. g. *H. budensis* Erd., *Eupelmus cavifrons* Bčk., *Macroneura jalcata* (Nik.), *Cirrospilus talitzkii* Bčk., *Danuviella subplana* Erd., *Microlysuc virens* Erd., *M. erdoesi* Bčk., *Necremnus hungaricus* (Erd.), *Sympiesis flavopicta* Bčk., *Diadocerus breviramulus* Bčk., *Hemiptarsenus zilahisebessi* Erd., *Cleolophus autonomus* Merc., *Chrysocharis cerris* Erd. and many others.

The definition of the forest elements is at least as vague as that of the steppe elements. It may be said in general, however, that most Pteromalidae and at least a half of Eulophidae (together with Encyrtidae

the three families richest in species in Moldavia) seem to be forest dwellers or at least associated with trees and bushes.

We cannot say what determines the distribution of all Chalcid flies. It is felt that it is often a vague, inaccurate term for a parasitic species, if we call it a "steppe element" or a "forest element", as long as we do not know much about its hosts. I do hope that there will be still much more information about the hosts of the Moldavian Chalcidoidea before long. I wish then to go deeper into the matter of the host-relationship, as well as of the zoogeographic classification of the Moldavian Chalcid flies.

DESCRIPTIONS OF NEW SPECIES AND NOTES ON SYNONYMY AND NOMENCLATURE
OF SOME OTHER SPECIES.

***Sphegigaster stepicola*, n. sp., Pteromalidae**

F e m a l e. — Dorsally mainly dark bluish-green, abdomen almost black; face and occiput, as well as sides of thorax more bluish. Antennae blackish, scapes with bluish metallic tint. Coxae and femora concolours with the body, but trochanters and tips of femora paler, brown. Tibiae and tarsi mainly brownish-testaceous, mid and hind tibiae broadly infuscate, infuscation usually stronger at base, just beyond the pale ring of the knee; also claw segment infuscate. Wings hyaline, venation pale brown.

Head from above strongly transverse, 31:14, wider than the meso-scutum as 31:25, with temples developed but strongly, straightly receding, converging backward at an angle of about 100°. POL:OOL = 8:5. In anterior view head transverse-oval, 31:24. Relative measures: eye 15.3:10, malar space 5.6, scapus 11, flagellum plus pedicellus 27. Malar depression rather deep and wide. Antenna short (fig. 3); scapus taken without radicle almost as long as pedicellus plus ring segments plus basal three funicle segments; pedicellus only slightly longer than broad; all six funicle segments transverse, subequal in length and in the holotype scarcely increasing in width, each with one row of longitudinal sensilla.

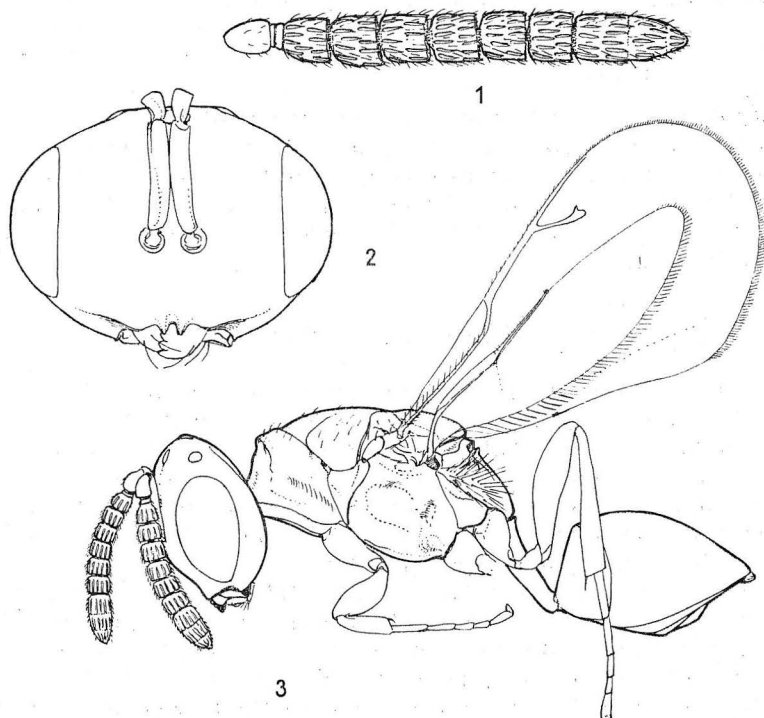
Pronotum with collar vaguely set off (in larger specimens; in smaller ones the edge quite obliterate) and with vague waves indicating the dents. Scutellum slightly convex, hardly longer than wide. Propodeum in median part fairly regularly reticulate, plain. Forewing with relative lengths *m* 14, *pm* 13, *st* 8; basal fold with a row of 4—7 hairs, speculum of medium size, open below.

Abdominal petiole almost three times as long as broad anteriorly. Gaster not unusually acuminate, in most specimens after death the terminal segments are retracted under the large second tergite. Hind margin of the first gastral tergite straight in the middle, along median line this tergite about three times shorter than the second.

Length of the holotype 2.0 mm., otherwise varying from 1.6—2.0 mm.

M a l e. — Similar to female in colour, small body size (1.5—1.8 mm.) and in the truncate median part of hind margin of the basal gastral ter-

gite. Very characteristic are the antennae: scapus hardly thickened in the middle, its relative length 8, pedicellus plus flagellum 31 (with width of head 27); pedicellus as long as the first funicle segment; flagellum stout, filiform, covered with rather short and almost adpressed hairs, each funicle segment subquadrate and bearing two rows of fine longitudinal sensilla; in larger specimens middle segments of the funicle slightly



Figs. 1—3. *Sphegigaster stepicola*, n. sp.: Fig. 1. Pedicellus with flagellum of the male antenna. — Fig. 2. Head of female in facial view. — Fig. 3. Body of female.

longer than wide, but even then the first one is quadrate. Pronotal edge with teeth vaguely indicated, in smaller specimens obliterate.

Variation: Infuscation of the tibiae may be very dark or very weak; in specimens with very dark tibiae also tarsi are extensively infuscate distally (so in the holotype). In smaller female specimens basal funicle segments are usually narrower than the distal ones, the flagellum is then more clavate; pronotum in such specimens is nearly rounded, without any distinct edge.

Host: *Phytomyza albiceps* Meig. in *Cirsium arvense* (in Austria).

Distribution: Czechoslovakia, Austria, Moldavian SSR, Algeria.

Holotype (female): Czechoslovakia, Bohemia: Hazmburk Hill, 26. VII. 1948 (Bouček lgt.); deposited in the Prague National Museum (Entomology), under Cat. No. 26.006.

Paratypes (27 ♀♀ and 5 ♂♂): Czechoslovakia: Bohemia, Milá Hill in the Středohoří Mts., 10. VII. 1948 (Bouček); Hazmburk Hill, with the holotype (Bouček); Praha-Troja, 29. VI. 1934 (Šustera); Chuchle near Praha, 7. VI. (the allotype) and 27. VI. 1954 (Bouček); Moravia, Čejč, 26. VIII. 1942 (Kocourek); Sv. Kopeček near Mikulov, 4. and 7. VII. 1952 (Hoffer); Slovakia, Štúrovo, 25. VII. 1946 (Šnoflák); Slovenské Nové Mesto-Piliš Hill, 31. V. 1952 (Hoffer); Velký Kamenec (= Kevežď), 15. IX. 1951 (Hoffer); Somotor, 10. VIII. 1948 (Bouček); Ladmovce-Baba, 23. and 27. VI. 1952 (Kocourek); Svätá Mária-Rad, 13. IX. 1951 (Hoffer). — Austria: Böhheimkirchen, ex *Phytomyza albiceps* in *Cirsium arvense*, 29. VII. 1922 (Fahringer). — Moldavian S S R: Vadu-lui-Vody, 16. VII. 1961 (Bouček); Slobodzeya, slope at the Dniestr, 5. VIII. 1960 (Talitzki); Karmanovo, 27. VIII. 1963 (Bouček). — Algeria: Oran, 10. V. 1958 (J. Barbier; coll. Granger).

S. stepicola may be easily separated from all the other palaeartic species of the genus *Sphegigaster* Spinola on the combination of the following characters: small, dark-coloured body with rather extensively infuscate legs, short antennae in both sexes and truncate hind margin of the basal tergite of the gaster. The species seems to be associated with the steppe habitat.

Schimitschekia, n. gen., Pteromalidae

Body not slender. Head strongly transverse seen from above, not much wider than the thorax. Occiput immargined, temples narrow, strongly receding, terete. Antennae inserted fairly below centre of face, just above lower ocular line. Scrobes very shallow. Clypeus very transverse, tentorial pits indistinct, lower margin of clypeus with two strong teeth, the left one stronger than the right one. Mouth normal. Genae without distinct depressions, genal sulcus almost indistinct. Mandibles normal; teeth not seen properly, probably 4:4. Antenna of female short, subfiliform, 13-segmented, 11263, with scapus sublinear and not reaching the anterior ocellus, both ring segments very short, funicle segments subequal in width, transverse, each with one row of longitudinal sensilla; clava with perpendicular sutures, without distinct area of micropilosity.

Thorax fairly convex. Pronotum sharply margined, the sharp margin of collar is not very thin and does not reach the lateral corners; seen from above lateral corners look rectangular and there is a distinct emargination between them and the spiracular corner of pronotum; collar laterally not much longer than in the middle, the caudal smooth strip fairly broad; lateral panels of pronotum not unusually large, with distinct depression behind the elevated lower anterior corner and below upper anterior corner. Parapsidal grooves complete, but very shallow, especially posteriorly. Scutellum convex, without distinct frenal groove. Propodeum short, weakly sculptured, convex between the deep and short post-spiracular sulci, with a thin median carina connected with carinaceous margin of the low and broad nuchal strip; the latter connected with plicae which are quite distinct posteriorly; anterior plical foveae wide and shallow; lateral fimbriae very poor. Hind tibia with one distinct spur only. Wings fully developed, normal, hairy and with distinct marginal ciliation. Forewing basally bare, but basal fold and cubital fold beyond middle of basal cell with a line of hairs, but speculum usually more or less open

below; stigmal vein not unusually knobbed, almost twice as short as the marginal vein which is about as long as the postmarginal one.

Abdomen distinctly petiolate, the petiole slightly elongate, its sides subparallel, its surface granulate with a median carina indicated and basally with distinct auricles. Gaster of female smaller than the thorax, subtrapezoidal, with the basal tergite covering more than half the surface,

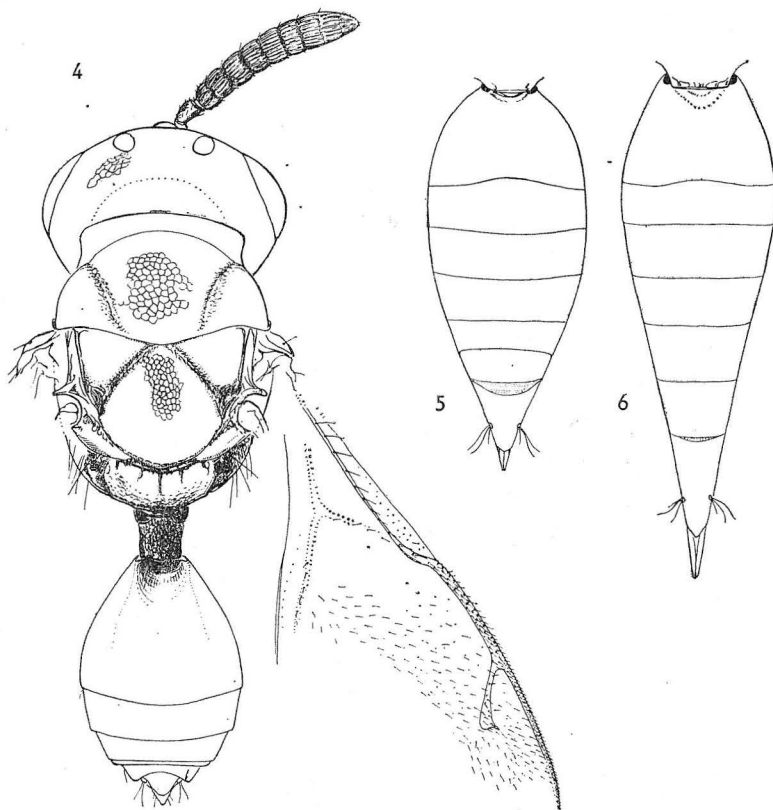


Fig. 4. *Schimitschekia populi*, n. gen. n. sp., body of female with a part of right forewing; sculpture partly indicated. — Fig. 5. *Hemitrichus seniculus* (Nees), abdomen of female.
Fig. 6. *Hemitrichus oxygaster*, n. sp., abdomen of female.

its hind margin not incised, but broadly slightly produced; the second tergite not very large, its hind margin straight. Ovipositor subexserted.

Male not known.

Type-species: *Schimitschekia populi*, n. sp.

The genus named in honour of the well known forest entomologist, Professor E. Schimitschek of Hann. Münden, to whom I am indebted for some very interesting material of Chalcids.

Schimitschekia belongs to Sphegigasterini, and by the shape of its body, in particular of the head, propodeum and gaster, it is very near to *Thinodytes* Graham, 1956. But the latter genus differs clearly by the

rounded anterior margin of the pronotum, the relatively longer stigmal vein, the hind margin of the first gastral tergite emarginate in the middle and sinuate laterally, etc. *T. cyzicus* (Walker), the only European species of *Thinodytes*, has dark tibiae while these are pale in *Schimitschekia populi*. The new species is a parasite of Diptera like all species of this group (e. g. genera *Thinodytes* Grah., *Bubekia* D. T., *Halticoptera* Spin., *Syntomopus* Walk., *Sphegigaster* Spin., *Platecrizotes* Ferr., *Cyrtogaster* Walk., etc.).

***Schimitschekia populi*, n. sp.**

F e m a l e. — Body bluish-green; occiput, genae and abdominal petiole greenish; sides of thorax and gaster darker, almost black. Antennae blackish, scapus with metallic bluish tint as well as coxae; femora extensively infuscate with slight metallic tint, legs otherwise pale testaceous. Wings hyaline, venation brown.

For relative dimensions of head, thorax and abdomen and for antenna see fig. 4. Funicle with longitudinal sensilla more distinct than the almost adpressed short pubescence; relative length of flagellum plus pedicellus to width of head as 22:24. Head in facial view transverse in relation 24:19, relative minimum width of frons 15.5, height of eye 11, malar space 5. Lower face between antennal insertion and clypeus moderately convex.

Mesopleura: mesepisternum and lower part of mesepimeron reticulate, upper mesepimeron smooth. Prepectus rather large, reticulate, without any carina, its upper and posterior borders smooth.

M a l e. — Not known.

H o s t: *Phytomyza populi* (Kaltenbach) in Western Germany (and probably some other, related miners).

D i s t r i b u t i o n: Western Germany, Moldavian SSR.

H o l o t y p e [female]: W. Germany, Lorsch, ex "*Phytomyza populi* Klth.", VIII. 1961 (Nieman lgt.); deposited in the Prague National Museum (Entomology), under Cat. No. 26.008.

Paratypes (3 ♀♀): W. Germany: Hann. Münden, Stadtgebiet, ex „*Phytomyza populi* Klth., Zucht Nr. 7“, II. 1961 (E. Priesner). — Moldavian SSR: Synzhereya-Kopatsheny, swept from marsh vegetation, 18. VII. 1961 (Bouček a. Talitzki).

***Pachyneuron aeneum* Masi, Pteromalidae**

Pachyneuron aeneum Masi, 1929, Ann. Mus. civ. St. nat. Genova, **53**: 229; ♀.

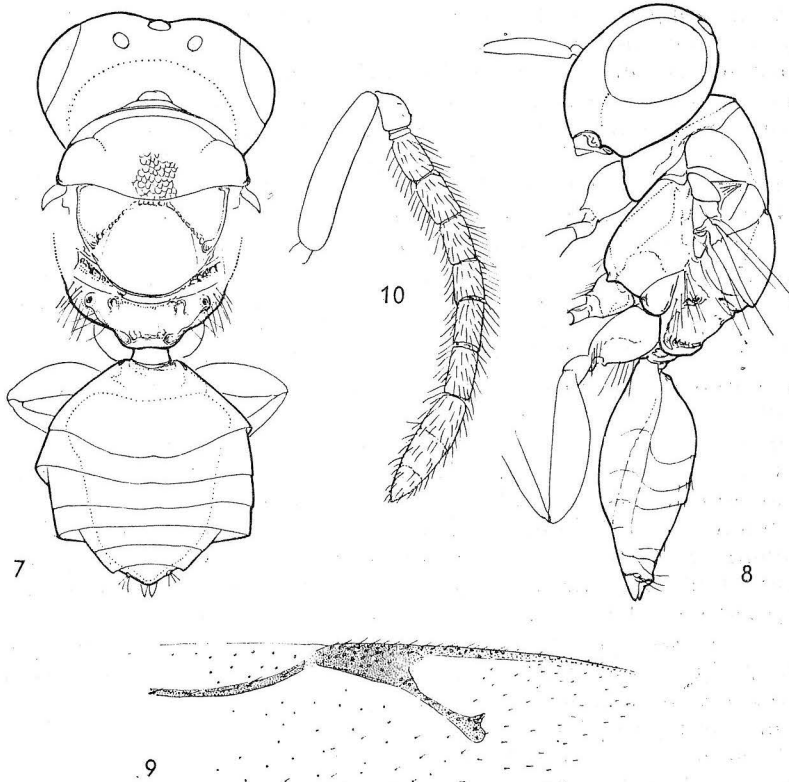
Atrichoptilus aeneus: Delucchi, 1955, Zeitschr. angew. Ent., **38**: 141—142.
38: 141—142.

R e d e s c r i p t i o n of the species.

F e m a l e. — Body rather dark metallic green, sides of thorax usually slightly bluish-green. Antennae blackish with testaceous scapes. Legs with coxae and femora concolorous with the body; trochanters, femora on both tips, tibiae and tarsi testaceous; tibiae slightly but broadly infuscate, also claw segment of tarsi infuscate. Wings hyaline, venation brown.

Body plump (fig. 7). Head stout, in dorsal view fully twice as wide as long (35:17), in frontal view transverse in relation as 35:24. Clypeus with lower margin in the middle truncate, seen obliquely in a ventro-

anterior view slightly broadly emarginate. Posterior genal angle about 140° , rounded. Relative measures: malar space 8, eye 15:12, length of scapus (without radicula) 12, flagellum plus pedicellus 23. Antennae short and rather stout. Pedicellus almost twice as long as wide; both ring segments strongly transverse; all funicle segments transverse, subequal in length or scarcely increasing in length and only very slightly increasing



Figs. 7—10. *Pachyneuron aeneum* Masi: Figs. 7—8. Body of female in dorsal and lateral views. — Fig. 9. Part of forewing with venation and pubescence; simple points indicate insertions of hairs on lower surface of the wing blade. — Fig. 10. Male antenna.

in width, the first one about 1.2 times, the sixth 1.3 times, as wide as long; clava almost as long as four preceding segments combined.

For thorax and abdomen see figs. 7 and 8. Propodeum short, moderately sloping, in the middle from base to nuchal strip fully half as long as distance between plicae basally (5.5:10); the latter indicated by rounded anterior plical foveae and posteriorly by very short plical folds in the depression before nuchal strip; median carina sometimes indicated basally; interplical space regularly reticulate; nuchal strip distinctly set off, its surface plain, very delicately cross-striolate; along inner margin of spiracular sulcus a row of 3—4 bristles. For the venation of the forewing see fig. 9.

Abdominal petiole slightly transverse, subconical, dorsally transversely striate-reticulate. Gaster subcircular.

Length of body 1.7—1.9 mm.

Male. — Very similar to female in most respects, but usually slightly more brightly green, legs except for coxae wholly pale-testaceous, abdomen narrower, antennae longer (fig. 10): flagellum plus pedicellus 1.1 times as long as width of head (35:32.5); pedicellus only 1.2 times as long as broad, decidedly shorter than the first funicle segment which is slightly narrower and twice as long as broad; the following funicle segments of the same width and slightly decreasing in length, the sixth funicular still 1.6 times as long as broad; whole funicle covered with dense semi-erect hairs which are slightly shorter than width of the segments. Length of body 1.4—1.8 mm.

Hosts: aphidophagous Syrphidae (in Moldavia).

Distribution: Moldavian SSR, Turkey, Libia.

Material (31 ♀♀ and 30 ♂♂): Moldavian SSR: Plot', pear tree, 1. VIII. 1958 (Talitzki); Kishinev, ex Syrphid puparium found in soil, 20. IV. 1961 and ex Syrphid puparia among aphids *Yezabura reaumuri*, 6. VII. and 13. VII. 1961 (Talitzki). — Turkey (Asia Minor): Anatolia, Hasanoglan, 13. VII. 1947 (Exped. Nat. Mus. Prague).

The collar carina in *P. aeneum* is sometimes obliterate and this made Delucchi erect the genus *Atrichoptilus* for the species. I have seen recently the type of *P. aeneum* Masi and it is identical with the present material which proves that a generic separation from the other *Pachyneuron* species would not be justified. Therefore I consider *Atrichoptilus* Delucchi, 1955 a synonym of *Pachyneuron* Walker, 1833 (new synonymy).

Pachyneuron aeneum belongs to the *formosum*-group of the genus, in the Moldavian fauna together with *P. grande* Thoms., *P. umbratum* Del. and *P. planiscuta* Thoms. It differs from all European species chiefly by its squat body with unusually broad, wedge-shaped marginal vein which is slightly shorter than the stigmal vein. Another near species may be *P. longiradius* Silvestri from Africa.

In my first paper on the Moldavian Chalcids (Bouček, 1961) I mentioned *Pachyneuron grande* Thoms., *P. umbratum* Del., *P. solitarium* (Hartig) (= *concolor* Förster) and *P. aphidis* (Bouché) (= *minutissimum* Förster). My further study, which added to the Moldavian list *P. cremifaniae* Del., *P. aeneum* Masi and *P. planiscuta* Thoms., has confirmed the synonymy of *P. solitarium* (= *coccorum* auct., nec Linnaeus) and of *P. aphidis*. Furthermore it has suggested a possible synonymy of *P. umbratum* Delucchi, 1955, with *P. formosum* Walker, 1833. I have examined the British material of *P. formosum*, which differs mainly only by the relatively shorter marginal vein from most continental specimens. However, this character seems to be variable and thus unreliable. The *Pachyneuron* species are very difficult because of the often very tiny differences between species on the one hand, and on the other owing to relatively wide variation. In my opinion *P. siculum* Delucchi, 1955, are only small specimens of *P. solitarium* (Hart.), the host range of which is surprisingly wide. Also several North-American species seem to be identical with certain European species and this problem should be studied before a revision of our *Pachyneuron* species is prepared.

Hemitrichus oxygaster, n. sp., Pteromalidae

F e m a l e. — In colour of the body very similar to *H. seniculus* (Nees) (= *rufipes* Thoms.), but a little more bluish and tibiae and scapes seem to be decidedly paler, at least in comparison with the usually infuscate femora. Also morphologically very similar to *H. seniculus*, therefore in the following I mention mainly those characters in which *H. oxygaster* differs from the former species.

Head in side view lenticular, at the stoutest at insertion of antennae, its length (stoutness) here in relation to height measured from tip of the clypeal tooth to the extremely short and raised vertex as 16:33. Eye irregularly oval, 13:21. Relative length of malar space along the slightly arched and fine genal sulcus 7, gena behind the sulcus smooth. Scapus very narrow, linear, its relative length 16, length of flagellum plus pedicellus 40; first funicle segment 1.6 times as long as wide, the last (sixth) one only hardly longer than broad.

Thorax as in *H. seniculus*, but propodeum with nucha more distinctly indicated; apical fovea (sensu Delucchi) much deeper, thus better delimiting the nucha on the sides; supracoxal flange broader than distance between spiracle and anterior margin of propodeum; plicae indicated only anteriorly as the outer fold-like margin of the anterior plical foveae. Forewing measurements: costal cell 35, *m* 18, *pm* 19, *st* 10 and angle between stigmal vein and postmarginal vein slightly sharper than in *H. seniculus*; forewing length 93, width 37. Hindwing: distance between basal cell end and apex of venation 23, width of wing 19 (in *seniculus* these measures are 22 and 21, respectively).

Gaster 1.5 times as long as head plus thorax or nearly so (in the holotype 93:61), 2.8—3.3 times as long as wide, conical (fig. 6), vaulted, tergites 3—6 medially subequal in length, epipygium fully twice as long as broad at base (at margin of the preceding tergite), pygostyli at about three-fifths of its length. Ovipositor sheaths straightly tapering to apex, slightly exerted.

Length of the holotype 3.3 mm., of the other two females 2.5 and 5.6 mm. (the largest is the Slovakian specimen).

M a l e not known.

H o s t s not known.

D i s t r i b u t i o n: Czechoslovakia, Moldavian SSR.

H o l o t y p e (female): Moldavian SSR: Sadovo, beaten from trees, 24. VIII. 1963 (Bouček leg.); deposited in the Prague National Museum (Entomology), under Cat. No. 26.000.

P a r a t y p e s (2 ♀♀): Czechoslovakia: Kováčov near Štúrovo in southern Slovakia (probably Obenberger leg.). — Moldavian SSR: Strasheny, 21. VIII. 1963 (Bouček leg.).

This species differs from the single known European species of the genus *Hemitrichus* Thoms., *H. seniculus* (Nees), mainly in the form of the abdomen in female. In *seniculus* the gaster is scarcely or very slightly longer than head plus thorax, 2.3—2.4 times as long as broad, with the middle tergites relatively much shorter (fig. 5), epipygium not longer

than broad at base, propodeum less obviously constricted to a nucha posteriorly, marginal vein relatively shorter (at least in average relation to the length of the stigmal vein), etc.

Lariophagus fimbriatus, n. sp., Pteromalidae

F e m a l e . — Body dark metallic bluish-green; scapus and pedicellus testaceous, flagellum blackish-brown or brown; coxae and femora (mainly, except tips) concolorous with the body, but trochanters, tibiae and tarsi testaceous. Wings subhyaline or slightly yellowish infumate on disc below marginal and stigmal veins.

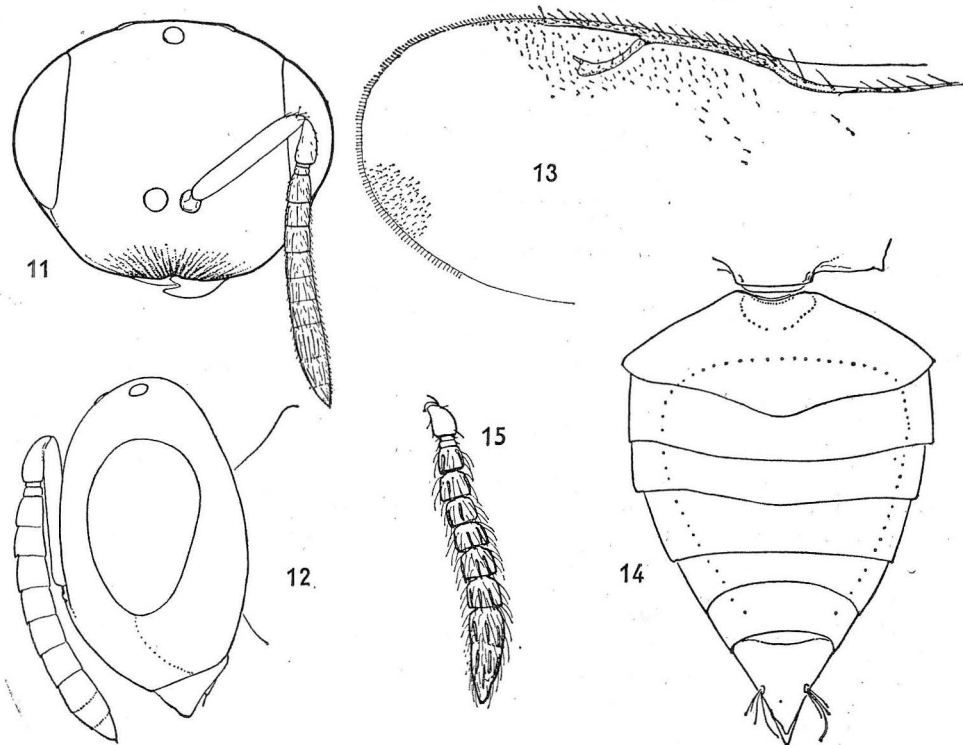
Head less stout than in *L. distinguendus* (Först.), face less convex, eyes more protruding and inner orbits slightly diverging downward. In facial view (fig. 11) width of head 29, height 24, antennae inserted distinctly below centre, just above the lower ocular line; distance between antennal sockets and middle ocellus 14, between the sockets and mouth margin 6 (at the same facial view); face below antennae only moderately receding to the mouth, finely radiately wrinkled. Head in side view with lower face not protruding (fig. 12), genae rounded and shorter than in *L. distinguendus*, eyes larger, their long diameter fully twice as long as malar space from eye to mouth corner. Antenna rather short, relative lengths of scapus 12.5, and flagellum plus pedicellus 26. Scapus as long as pedicellus plus anelli plus three funicle segments; pedicellus slightly more than twice as long as wide, at least as long as (usually even longer than) the two ring segments with the first funicle segment combined; the latter segment subequal in length to the following funicle segments, all subquadrate; clava almost as long as three preceding segments together. Pubescence of antenna rather short and not outstanding, each flagellar segment with one row of longitudinal sensilla: 3—4 sensilla visible on each segment at any view.

Thorax in general shape almost as in *L. distinguendus*, but slightly depressed, mesoscutum and scutellum distinctly flattened, sculpture of mesoscutum coarser. Sculpture of propodeum more obsolete than in *distinguendus*, especially in sublateral and lateral parts, but median carina fairly distinct in anterior half of the sclerite; plicae indistinct, anterior plical fovea shallow, the cross-costula not even indicated, nucha less distinct, very short, in lateral view not set off; in dorsal view the posterolateral corners sharp, short. Forewing (fig. 13) pubescence not very dense and not extremely short, much longer and denser than in *distinguendus*, marginal ciliation developed (hence the specific name), only anteriorly on outer margin beyond venation extremely short or almost missing. Relative measures: costal cell length 19, *m* 13, *pm* 6, *st* 9, width of the same forewing 27, longest marginal ciliae 1. Basal fold with sparse hairs, at its lower end usually in two rows. Stigmal vein more or less curved in basal half.

Gaster (fig. 14) ovate-acuminate, subcordiform, slightly longer than the thorax, dorsally flat or slightly concave. First gastral tergite medially not longer than the two following together, its hind margin slightly produced in median third (as in *L. distinguendus*).

Length of the holotype 2.1 mm., the other specimens 2.0–2.3 mm.

Male. — Similar to female, but tibiae partly infuscate, antennae (fig. 15) covered with outstanding hairs, but the segments much shorter than in *L. distinguendus*: pedicellus 1.4–1.5 times as long as broad, but still longer than the first funicle segment which is, as well as the following segments, subquadrate. Forewing venation stouter than in *distinguen-*



Figs. 11–15. *Lariophagus jimbriatus*, n. sp.: Fig. 11. Head of female (the holotype) in facial view, with antenna. — Fig. 12. Head of another female in lateral view showing the moderate convexity of lower face. — Fig. 13. Part of forewing in female, with venation, pubescence and marginal ciliation. — Fig. 14. Female abdomen in dorsal view; the slightly concave (sunken) part indicated by dotted line. — Fig. 15. Male flagellum with pedicellus.

dus, marginal ciliation even longer than in the female, etc. Length 1.7–1.9 mm.

Host not known (but probably some Anobiid beetle in timber in woods, not necessarily associated with man).

Distribution: Czechoslovakia, Moldavian SSR.

Holotype (female): Czechoslovakia: Pukanec in southern Slovakia (between Levice and Banská Štiavnica), 31. VII. 1955 (Dlabola leg.). Deposited in the Prague National Museum (Entomology), under Cat. No. 26.005.

Paratypes (5 ♀♀, 2 ♂♂): Czechoslovakia, Slovakia: Hedfárok Hill near Stúrovo, 1 ♀, 27. VII. 1955 (Bouček); Pukanec, 1 ♂, allotype, with the holotype, 31. VII. 1955 (Bouček); Mt. Sitno, 1000 m., 1 ♀, 1. VIII. 1955 (Bouček); Banská Štiavnica, 1 ♂, 30. VI. 1952 (Boučková); Slanec — Lake Izra, 1 ♀, 6. VIII. 1954 (Bouček). — Moldavian S S R: Strasheny 1 ♀, 21. VIII. 1963 (Bouček); Sadovo, 1 ♀, 24. VIII. 1963 (Bouček).

Lariophagus fimbriatus may have been mistaken for *L. distinguendus* (Förster, 1841), the well known parasite of the grain weevil and of some other beetles in stored products. The new species differs from *distinguendus* in many respects, the most striking being the shorter antennae (fig. 11), terete genae, the less stout head, ciliate forewing margins, obsolete sculpture of the propodeum, gaster usually sinking in dorsally after death, etc., and, last but not least, the obviously different biology.

Merisus flagellatus, n. sp., Pteromalidae

F e m a l e. — Very similar to *M. splendidus* Walk. so that only differences from this species are pointed out here.

Body more greenish; antennae brownish, beneath and apically dirty testaceous, the two colours not so strikingly separated as in *M. splendidus*. Ocelli smaller: distance of lateral ones from eye 2.3 times their longest diameter. Eyes smaller, the longest diameter 3 times as long as malar space, 17.5:6 (more than 4 times so in *splendidus*). Antenna (fig. 17) not so short and stout as in *splendidus*, subclavate, flagellum plus pedicellus hardly shorter than width of head (34.5:35); pedicellus fully 1.5 times as long as wide; funicle segments slightly increasing in width and subequal in length, the first 1.3 times as long as broad, the second to fourth still slightly oblong, the sixth quadrate. Clava as long as two preceding segments together, not sharply acuminate, the sutures distinct and less oblique than in *splendidus*. Forewing in the female allotype with hairs on basal fold reduced to two (this probably variable here as well as relative lengths of the veins; in males the basal fold bears a complete hair row). Thorax as in *splendidus*. Gaster hardly longer than thorax, 53:50, the basal tergite covering one-quarter of the surface. Length of the body 2.4 mm.

M a l e. — In colour very similar to *splendidus*, i. e. predominantly bluish-green, with antennae yellow beneath, but with infuscate distal half of the scape, the whole pedicellus and dorsally the flagellum. Legs pale yellow with coxae metallic and femora infuscate with a metallic tint.

Head from above less transverse than in the average *splendidus*, width to maximum length as 26:14. Ocelli small, POL:OOL = 8:4, the OOL being fully twice as long as the longest diameter of the lateral ocellus (about 4:3 in most males of *splendidus*). Face fairly convex. Head from the side 22:14, relative height of eye 12. The main difference from *splendidus* lies in the form of the antenna (fig. 16): flagellum plus pedicellus twice as long as width of head (in *splendidus* about 1.5:1), narrowly filiform; scapus hardly longer than the first funicle segment which is about 2.5 times as long as the globular pedicellus and nearly 2.5 times as long as wide, subcylindrical, not distinctly inflated beneath as in *splendidus*, but its apex is also slightly obliquely truncate; its surface with about 5

irregular rows of longitudinal sensilla. The second to sixth funicle segments each fully twice as long as wide; funicle hardly decreasing in width towards apex. Clava acuminate, nearly as long as two preceding segments together and almost four times as long as wide; its first segment about 1.7 times as long as broad. Otherwise antenna of the same type as in *splendidus*. Also the other body parts do not provide any reliable character.

Length 1.8—2.2 mm. (holotype 2.1 mm.).

Variation: in the two males-paratypes the antennae are somewhat shorter than in the holotype, but the partly collapsed funicle segments (after a previous preservation in alcohol) second to sixth are still at least 1.8 times as long as wide.

Host not known; most probably a grass-stem dweller of the steppe habitat.

Distribution: Moldavian SSR.

Holotype (male): Moldavia: Rybnitsa, 12. V. 1959 (V. I. Talitzki). Deposited in the Prague National Museum (Entomology), Cat. No. 26.009.

Paratypes (1 ♀, 2 ♂♂): Moldavian SSR: Karmanovo, 2. VII. 1961, 1 ♀, allo-type (Bouček); Rybnitsa, 31. VII. 1959; Kishinev, 17. IV. 1961 (Talitzki).

This is the second European species of *Merisus* Walk. s. str., for I consider *M. acutangulus* Thomson, 1878, only a dwarf specimen of *M. splendidus* Walker, 1834 (new synonymy). I have seen the respective types.

***Aggelma agrili*, n. sp., Pteromalidae**

Lanceosoma sp., Bouček, 1961b: 13.

Female. — Head and thorax mainly dull metallic green, occiput and sides of thorax tending more towards bluish-green; gaster almost black, with faint metallic reflections: middle tergites mainly bluish with a greenish apical band. Antennae blackish, scapus testaceous. Coxae concolorous with the body, legs otherwise rather pale testaceous, only mid tibiae and hind femora and tibiae (except for the paler tips) a little darker, more reddish. Wings hyaline.

Head in dorsal view twice as wide as long, 40:20, relative minimum width of frons 26, length of temples (from above) 6, length of eyes 13.5. Temples converging moderately strongly behind eyes, their outline slightly arched. POL:OOL = 9:7. In frontal view head transverse, fully 1.2 times as wide as high (40:33); eye orbits strongly diverging downward; antennal sockets situated below centre of face, just above the lower ocular line; the longest diameter of eye in relation to length of malar space as 18:11; lower margin of clypeus almost straight, hardly emarginate. Surface of head rather finely reticulate, clypeus radiately strigose. Antennae slender, almost filiform; flagellum plus pedicellus slightly longer than width of head. Scapus nearly straight, just reaching lower margin of the unpaired ocellus, as long as pedicellus plus basal part of flagellum up to middle of the second funicle segment. Pedicellus fully twice as long as broad and as long as the first funicle segment; both ring segments together about as long as the second wide; the funicle segments decreasing in length and only the distal ones slightly increasing in width,

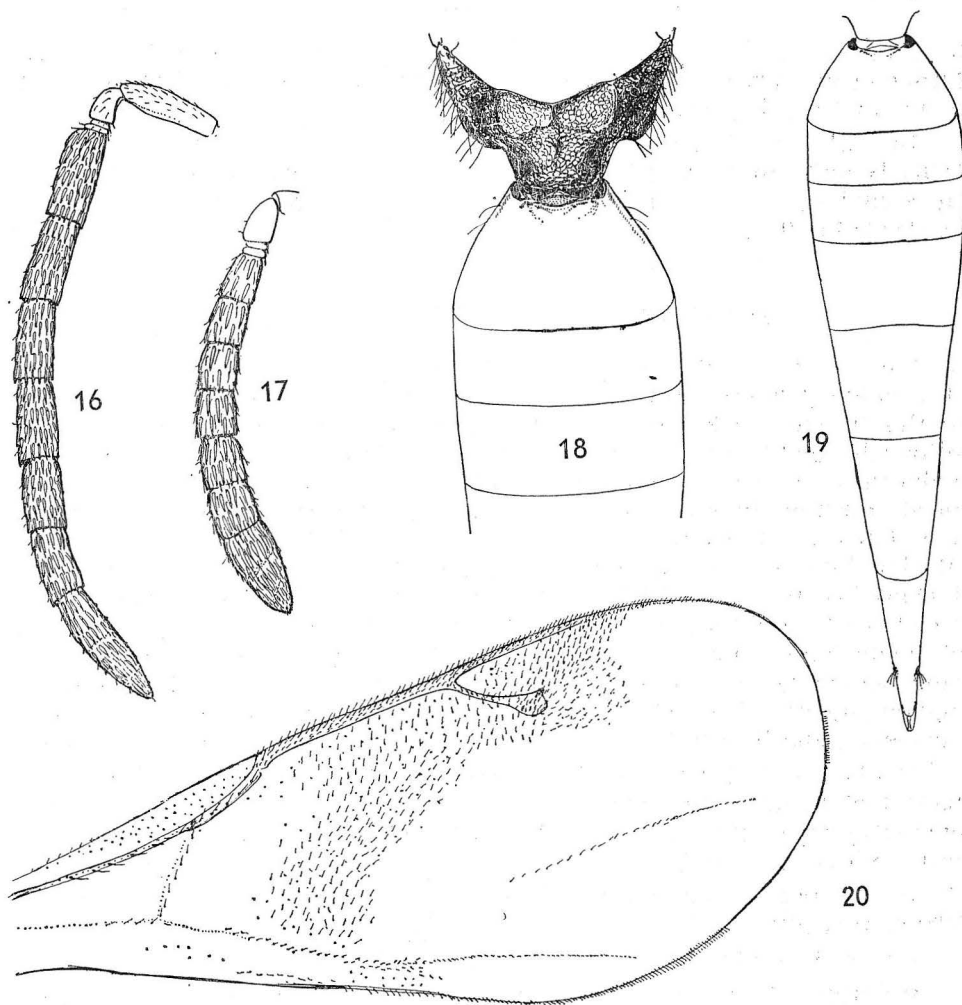
segments 1 to 5 elongate, the first about 1.9 times as long as broad, the sixth quadrate; each of them bearing in its distal part one row of longitudinal sensilla. Clava oval, slightly broader than and about as long as, the two preceding segments; sutures almost perpendicular; a narrow area of micropilosity spreading beneath along the last segment only.

Thorax almost 1.9 times as long as (mesoscutum) wide. Pronotum with collar carina distinctly raised; the smooth strip along hind margin in the middle taking hardly one-third, collar here only one-eighth as long as the mesoscutum, laterally broader, its sides in dorsal view broadly diverging. Mesoscutum about 1.5 times as broad as long, moderately convex, rather regularly reticulate; notauli distinct only in anterior half. Scutellum convex, very slightly longer than broad (18:17), its reticulation decidedly finer than that of the mesoscutum; frenum not differentiated by sculpture, only on sides its limits indicated by short smooth lines from the apex of the axillulae. Dorsellum very narrow, crescentic, weakly reticulate. Propodeum (fig. 18) medially fully 2/3 as long as the scutellum (13:18), reticulate, posteriorly plainly constricted to a nucha; plicae distinct and rather sharp anteriorly and posteriorly, in the middle interrupted, anterior part of plica archedly bending, before reaching the middle, inside and obliquely forwards to the anterior quarter of the sclerite, thus forming a broadly angulate costula crossing the irregular median carina which is traceable only in anterior half. Nuchal strip not clearly delimited, narrow. Spiracular sulci rather shallow, supracoxal flange strongly crescentic, twice as broad as dorsellum; spiracles oval, separated from the hind margin of the metanotum by full their length. Forewing measures: costal cell 45, *m* 31, *pm* 23, *st* 12. Stigma moderately large (fig. 20), uncus short. Costal cell above bare, on lower surface distally with abundant hairs about in three rows reduced to one row towards base; basal cell bare, basal fold and cubital fold at distal end of the basal cell pilose; speculum broadly open. Hind coxa bare dorsally, but with several hairs laterally.

Gaster narrowly lanceolate (fig. 19), almost twice as long as head plus thorax (60:35) and hardly narrower than the latter; dorsally slightly depress-concave in anterior half. First tergite occupying only one-eighth of dorsal surface, its hind margin almost straight in median half; the second and third tergites subequal in length, the fourth to sixth increasing in length, the sixth one 1.7 times as long as wide at the spiracles. Ovipositor sheaths slightly exerted. Hypopygium not reaching the middle of gaster. Anterior tergites bare except for a few hairs on sides (fig. 18), the apical two tergites shortly hairy all over.

Length 4.5 mm.

Male. — Differs from the female mainly in form of the antennae and of the abdomen, apart from some smaller differences such as the more obsolete plicae, the indistinct propodeal costula etc., connected with the smaller size of the body. Abdomen with a translucent spot subbasally. Scapus not enlarged; pedicellus 1.7 times as long as broad, much shorter than the first funicle segment, as long as the sixth; flagellar hairs obliquely distant, rather dense; funicle segments decreasing in length, the first 2.5 times, the sixth 1.3 times, as long as broad. Length 2.2 mm.



Figs. 16—17. *Merisus flagellatus*, n. sp.: Fig. 16. Male antenna. — Fig. 17. Female antenna. — Figs. 18—20. *Aggelma agrili*, n. sp.: Fig. 18. Propodeum (and anterior part of abdomen) in female. — Fig. 19. Female abdomen in dorsal view. — Fig. 20. Forewing in female, with pubescence partly omitted.

Host: *Agrilus viridis* (L.), Buprestidae, in black current twigs.

Distribution: Moldavian SSR.

Holotype (female): Moldavian SSR: Plot', ex *Agrilus viridis*, 27. VI. 1959 (V. I. Talitzki leg.); allotype (male): the same origin, VI. 1959. — The holotype deposited in the Prague National Museum (Entomology), under Cat. No. 26.007.

By its extremely long gaster in the female the new species reminds one of *Aggelma abdominalis* Delucchi, 1956, but has, apart from other differences, a much longer propodeum distinctly constricted to a nucha posteriorly and a distinct costula, which makes it an intergrade between

Aggelma Delucchi, 1956, and *Ablaxia* Delucchi, 1957. From all the known European species of this complex *Aggelma agrili*, n. sp. differs at first glance by its pale legs.

In 1961 I mentioned the species as "*Lanceosoma* sp.", but *Lanceosoma* Erdős is only an extremely long *Trichomalus* species (new synonymy). I was enabled to examine the type of *Lanceosoma altheae* Erd. thanks to Dr. Erdős in 1964.

***Cyclogastrella clypealis*, n. sp., Pteromalidae**

F e m a l e. — This is a species extremely close to *C. deplanata* (Nees) with which it agrees in most characters. Venation of forewing (fig. 22) usually brown, darker than in *deplanata*, in which it is usually more yellowish. Ocelli slightly smaller than in *deplanata*. Lower face only moderately convex, with lower margin of clypeus decidedly more produced, forming two flat semicircular lobes separated from each other by a sharp incision (fig. 21). Otherwise hardly different from *deplanata*, but flagellum still more spindle-like and distinctly shorter than width of frons just before ocelli, while in *deplanata* flagellum (less pedicellus, of course) is slightly but distinctly longer than width of frons; pedicellus relatively long, usually as long as basal four flagellar segments together (ring segments also counted), rarely slightly shorter; the first funicle segment mostly twice shorter than the second, broad, often even more transverse, anelliform. Length of body 1.9—2.5 mm., the holotype 2.1 mm.

M a l e. — Also very similar to *C. deplanata*, except for the clypeus character. Scapus slightly thickened in the middle. The first funicle segment more distinctly inflated beneath and antenna generally coloured more yellowish. Length 1.9—2.4 mm.

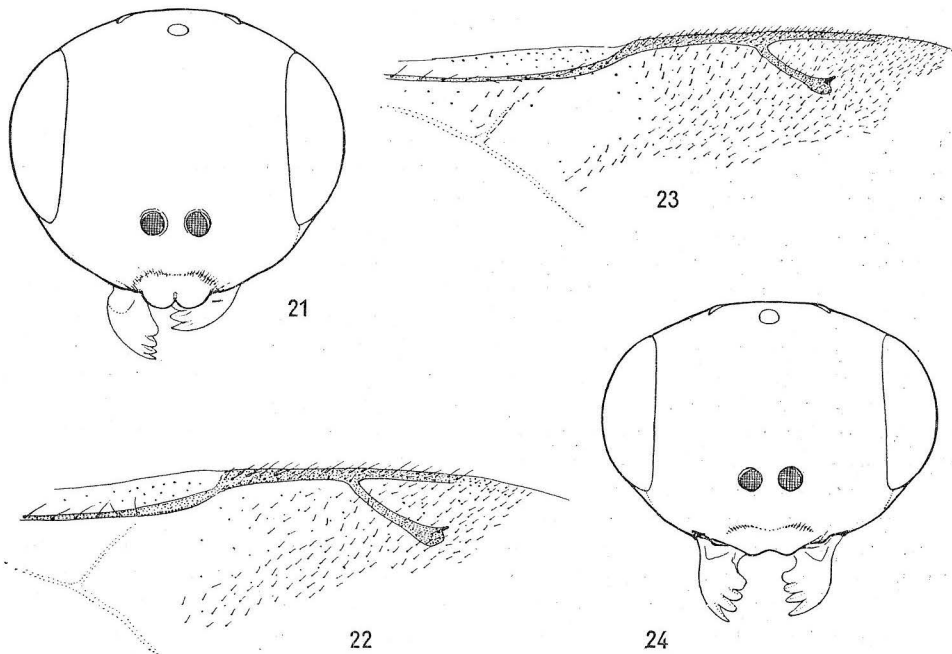
H o s t not yet known, probably also a Tortricid as in the two other European species of the genus.

D i s t r i b u t i o n: Czechoslovakia, Moldavian SSR.

H o l o t y p e (female): Czechoslovakia, Praha-Hanspaulka, on window, 3. X. 1947 (Bouček). Deposited in the Prague National Museum (Entomology), under Cat. No. 26.010.

Paratypes (25 ♀♀ and 3 ♂♂): Czechoslovakia: Bohemia: Ruzyně near Praha, 30. VII. 1953 (Bouček); Praha-Dejvice, 21. X. 1937 (Kolubajiv); Praha-Hanspaulka, with the holotype; Praha-Podhoř, 1. VIII. 1948 (Bouček); Radotín near Praha, 6. VIII. 1954 (Dlabola); Tábor, 7. VII. 1952 (Hoffer); Hradec Králové-Věkoše, 17. VIII. 1953 (Bouček); Moravia: Pavlovské kopce, Tuřold, 10. VII. 1952 (Hoffer); Slovakia: Kamenín near Štúrovo, 27. VII. 1955 (Bouček); Kamenica nad Hron., 23. VII. 1963 (Bouček); Banská Štiavnica, IX. 1956 and VIII. 1959 (Čapek); Tmavá dolina near Hnúšťa, 1951 (Pálpán); Košice, 27. VII. 1952 (Kocourek); Královský Chlmec, 27. VI. 1948 (Bouček). — Moldavian SSR: Synzhereya-Kopatsheny, 5. and 18. VII. 1961 (Bouček a. Taltzki); Kishinev, 14. VII. 1961 (Bouček); Vadu-lui-Vody, 16. VII. 1961 (Bouček).

This species being so similar to the common *Cyclogastrella deplanata* (Nees, 1834), I showed it to Dr. Graham of Oxford, who then examined all the Walker Pteromalid types considered identical with *C. deplanata* on the critical characters. Although Walker described several species of



Figs. 21—22. *Cyclogastrella clypealis*, n. sp., female: Fig. 21. Head in facial view; mind the characteristic clypeus. — Fig. 22. Part of forewing with venation and pubescence. — Fig. 23. *Cyclogastrella flavius* (Walker), characteristic venation and pubescence of forewing. — Fig. 24. *Cyclogastrella deplanata* (Nees), head of female in facial view.

this genus, they all are synonymous (except for *flavius* Walker, 1839, which is a valid species) with *C. deplanata* [Nees], not with *clypealis*. I wish to thank Dr. Graham for his kind help.

Key to the European species of *Cyclogastrella* Bukowski, 1938

- 1 Postmarginal vein decidedly longer than the stigmal, usually as long as the marginal or nearly so (Fig. 23); basal cell distally with 1—3 hair rows; antenna in female very slender, flagellum not distinctly spindle-like, but always with three ring segments and all five funicle segments quadrate; lower margin of clypeus emarginate in the middle; in male both ring segments together as long as wide *Cyclogastrella flavius* (Walker, 1839)
- Postmarginal vein subequal in length to the stigmal, only in male sometimes slightly longer than the latter, but always distinctly shorter than the marginal vein; basal cell bare, only in males sometimes basal fold with one hair row (Fig. 22); antenna in female stouter, first funicle segment often large, distal funicle segments always wider than long; in male both ring segments very thin 2
- 2 Lower margin of clypeus protruding as two semicircular flat lobes separated from each other by a sharp incision (Fig. 21); in female pedicellus longer, as long as four following segments combined or nearly so; in male antenna paler and first funicle segment more distinctly swollen beneath *Cyclogastrella clypealis*, n. sp.
- Lower margin of clypeus less protruding, its two short lobes separated from each other by a shallow emargination only (Fig. 24); in female pedicellus shorter, distinctly shorter than four following segments taken together (including the 2 or 3 ring-like segments); in male antenna usually dark and the first funicle segment less swollen beneath *Cyclogastrella deplanata* (Nees, 1834)

Dibrachys hians, n. sp., Pteromalidae

Female. — Dark metallic green; scapes and pedicels brown, flagella dark brown; mouth parts tar-black; coxae concolorous with the body, legs otherwise smoky brown, femora darker, blackish brown, tarsi and (at least front) tibiae a little paler. Wings hyaline.

Body rather plump, about as in *Cyclogastrella deplanata* [Nees], but head stouter. Head wider than the mesoscutum as 33:27, seen from above transverse in relation 33:18. Occipital margin almost straight, horizontal, confined to median one-quarter of head and situated very low on the occiput, near the foramen magnum, below the level of collar; the margin is not distinctly connected with the blunted hind border of the temples. POL:OOL = 9:5. Scrobes of medium size and slightly deeper than in *D. cavus* Walk. For head in facial view see fig. 26. Insertion of antennae above lower ocular line (by slightly more than one diameter of antennal socket). Middle of face below antennae distinctly convex (fig. 25) and from there almost straightly receding to mouth margin; clypeus not distinctly delimited above, its lower margin distinctly emarginate in the middle and its surface depressed at the emargination. Sides of face near lower inner orbits usually slightly depressed. Below at mouth corners face unusually raised and striated; striae (as well as those on clypeus) converging to the lower margin of the clypeus. Swelling of mouth corners confined to the facial part and extinct behind the obliterate genal suture. Head in front view with genae straight (fig. 26), these not margined posteriorly. Mandibles (fig. 27) 3:4. Antennae rather short (fig. 25); scapus in side view slightly enlarged above middle, as long as 7 following segments combined; pedicellus about 2.3 times as long as wide, slightly longer than following three segments together; first ring segment twice shorter than the second which is about twice as broad as long; first funicle segment subquadrate or very slightly transverse, the following ones more obviously transverse, the last (sixth) about 1.3—1.4 times as wide as long.

Thorax plump, length to width as 40:27. Pronotum without sharp margin on collar, the smooth stripe in the middle taking half the width of collar. Mesoscutum with meshes of reticulation fairly regular, polygonal, fine. Scutellum shorter than wide (15:18), flat, its reticulation on disc distinctly finer than on the sides and finer than that of the mesoscutum. Dorsellum raised along scutellar margin in a high carina. Propodeum with plicae strongly arched and distinctly fold-like because of anterior plical foveae being wide and relatively deep, nuchal foveae rather deep, reticulate on bottom. Forewing not densely hairy, basal fold almost bare (fig. 28); relative measurements of the venation: costal cell 31, *m* 16, *pm* 8, *st* 8. Marginal vein slightly removed from the actual front margin of the wing.

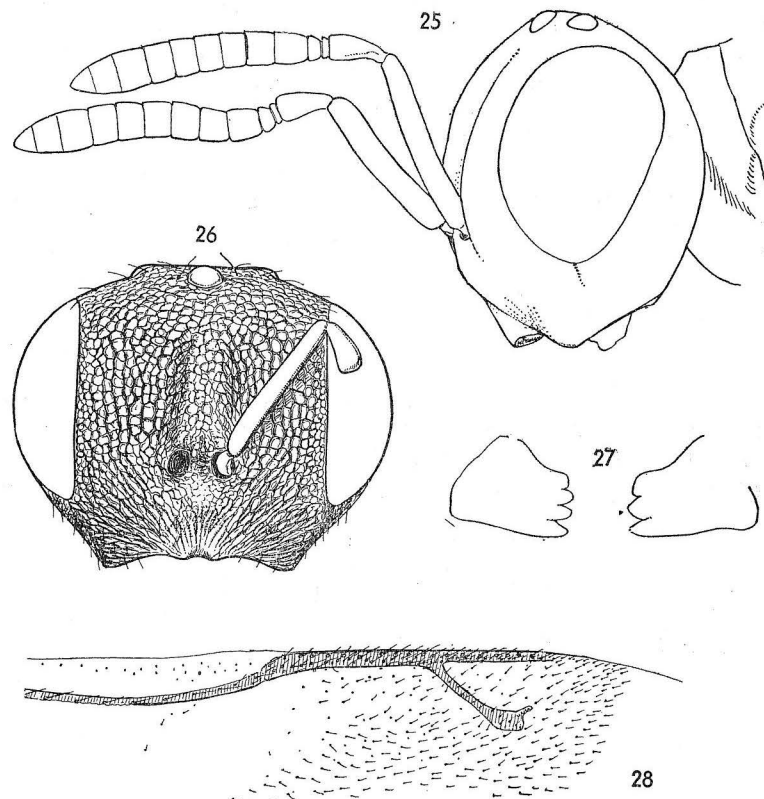
Gaster slightly oval, shorter and wider than in most other species of the genus. Hind margin of the first gastral tergite wide-angularly emarginate in the middle.

Length of body 2.0—2.5 mm.

Male not known.

Hosts not yet known. According to the taxonomic relationships this species is likely to be a parasite of pupae of some Lepidoptera or of puparia of some larger Diptera.

Distribution: Czechoslovakia, Austria, Moldavian SSR.



Figs. 25—28. *Dibrachys hians*, n. sp., female: Fig. 25. Head with antennae in lateral view. — Fig. 26. Head in facial view, with sculpture indicated. — Fig. 27. Mandibles in anterior view (the right mandible to the left, the left one to the right). — Fig. 28. Part of forewing with venation and pubescence.

Holotype (female): Czechoslovakia, Bohemia, Kunratice near Praha, on window of the Entomology Department of the National Museum of Natural History, 29. VIII. 1964 (P. Mikula lgt.). Deposited in the Prague National Museum (Entomology), under Cat. No. 26.003.

Paratypes (88 ♀♀): Czechoslovakia: Bohemia, Kunratice near Praha, park of the Department of Entomology, 1 ♀, 10. X. 1962 (Bouček), on windows of the Department, 80 ♀♀ apart from the holotype, 29. VIII. — 16. IX. 1964 (P. Mikula). — Austria: Wien-Mauer, on windows of a veranda, 1 ♀, 12. VIII. 1948, 1 ♀, 30. VI. 1952, 1 ♀, 4. VIII. 1952, 1 ♀, 14. VII. 1958, and 1 ♀, 18. VII. 1963 (dr. L. Fulmek). — Moldavian SSR (formerly Bessarabia): Kalarash, on a plum-tree, 1 ♀, 2. IX. 1957, and 1 ♀ on a hollow walnut-tree, 24. III. 1958 (V. I. Talitzki).

I designate *Dibrachys hians* as a type-species of a new subgenus, *Allo-dibrachys*, to which it belongs together with *Dibrachys affinis* Masi, 1907. Both species share following characters:

Body plump, appendages less slender than in *Dibrachys* Walker s. str. Left mandible 3-toothed, the right one 4-toothed (fig. 27). Occipital carina not forming part of the tentative border between vertex, temples and occiput as in *Dibrachys* s. str., but reduced to a transverse fold confined to the excavation of the occiput and shifted down to near foramen magnum.

From *D. affinis* Masi *D. hians* is easily distinguished by the form of the head with widened mouth (hence the specific name) and mouth corners jutting out (fig. 26), while in *affinis* the genae are convex and strongly converging to the small mouth.

All the other European species (and the North-American as well) seem to belong to *Dibrachys* s. str. and differ from *D. hians* apart from the subgeneric characters also in the normal shape of mouth. *D. maculipennis* Szelenyi, 1957, and *D. braconidis* (Ferrière et Faure, 1925), n. comb., have, in addition, a fuscous cloud on forewings.

According to Dr. M. Graham's kind information this species is not identical with any of those described by Walker (which all belong in the vicinity of *cavus-saltans*). Neither can *P. transversus* Förster, 1841, classified as a *Dibrachys* by Delucchi, 1955, be our species according to the description.

Key to most European *Dibrachys*

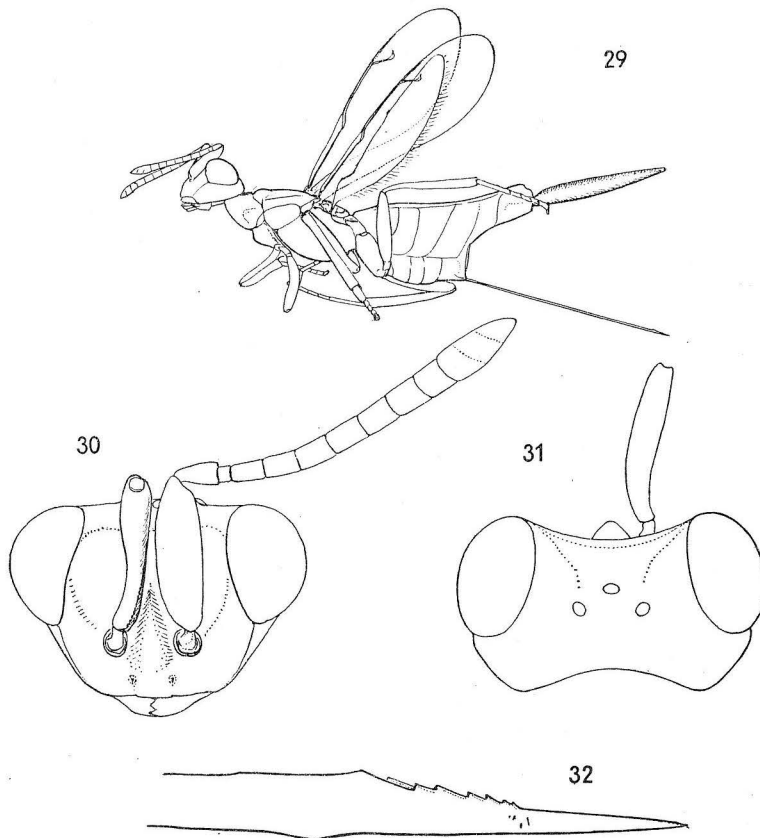
- 1 Head with occipital carina situated very low, much nearer to foramen magnum than to the paired ocelli; left mandible with only 3 teeth (*Allo-dibrachys*, n. subgen.) 2
- Occipital carina situated at, or near the level of the ocelli, well above the foramen magnum; both mandibles 4-toothed (subgen. *Dibrachys* Walk.) 3
- 2 Mouth corners unusually angularly protruding in facial view, usually produced below level of lower clypeal margin (fig. 26); mouth very wide; genae almost straight *D. (A.) hians*, n. sp.
- Mouth normal, genae archedly converging *D. (A.) affinis* Masi
- 3 Forewing more or less infumate 4
- Forewing hyaline 5
- 4 Face below antennal insertion flat, finely transversely wrinkled; forewing infumation strong and extensive; body larger, in female 2.9—3.8 mm. *D. (D.) maculipennis* Szel.
- Face below antennae receding towards mouth, reticulate; infumation of forewing reduced to a round faint macula on disc; body smaller, in female 2.4—3 mm. *D. (D.) braconidis* (Ferr. & Faure)
- 5 Face below antennae gradually receding towards mouth margin, in facial view with lower margin of clypeus distinctly visible as two protruding rounded lobes; body slenderer, smaller, brighter greenish (? a complex of:) *D. (D.) cavus* (Walk.)
- Lower face more strongly receding near mouth margin, clypeal lobes shorter and turned more backwards, therefore not well visible in facial view; head and thorax plumper, body larger, darker coloured, usually bluish-green *D. (D.) saltans* (Ratz.)

Eupelmus cavifrons, n. sp., Eupelmidae

F e m a l e . — Body (fig. 29) metallic bluish, in places almost black, but brassy on face, and more or less violaceous on vertex, in a stripe on lower gena, on prepectus, on lateral part of propodeum, on metapleura,

on external face of hind coxa and at base of each gastral tergite on the flanks of the abdomen; mesopleural shield more greenish. The small additional triangular sclerite below prepectus pale. Antennae black, scapus metallic, ring segment white. Palpi pale, last segment of maxillar palpi infuscate. Coxae and femora black or with slight metallic reflections, but mid coxae with trochanters as well as all tibiae rather pale yellow, the front and mid tibiae with a dark ring near base, the hind tibiae rather abruptly dark in proximal two-thirds; all tarsi pale with fuscous claw segment. Ovipositor sheaths black. Forewing infuscate, sometimes very dark and then with a darker spot at lower angle of costal cell; hindwings less dark.

Head in dorsal view (fig. 31) broader than thorax as 29:25, hardly twice as broad as long, in facial view (fig. 30) transverse, 19:25. Vertex not sharply bordered posteriorly, flat, ocelli small, POL = OOL, OOL fully as wide as three long diameters of lateral ocellus. Frons in front of ocelli



Figs. 29—32. *Eupelmus excavatus*, n. sp., female: Fig. 29. The holotype in lateral view. — Fig. 30. Head in frontal view with antenna. — Fig. 31. Head in dorsal view. — Fig. 32. Apex of ovipositor with the characteristic saw-like teeth.

moderately sloping and shallowly excavate (hence the specific name) between the subparallel orbitae, distance between scrobes and the anterior ocellus more than twice the diameter of the latter; scrobes very deep and broad, extending sideways just to eyes. Antennal insertion just below lower ocular line, distance between antennal toruli wider than distance between torulus and eye (6:5), elevated into vertical blunted crest; clypeus hardly archedly produced, marked on sides by shallow and small tentorial pits and on the mouth margin by slight notches. Genae converging, in outline (frontal view) almost straight, impressed just below the protruding subtriangular eye; genal suture deep, slightly curved; temples below well developed, straightly receding behind eyes. Antennae (figs. 29 and 30) slender and fairly long; scapus broadly expanded, well exceeding the vertex level, as long as pedicellus with base of the funicle up to the middle of the third funicle segment; pedicellus as long as the first funicle segment, the latter fully twice as long as broad, the following slightly decreasing in length and increasing in width, the seventh still slightly longer than broad; ring segment (whitish) only slightly transverse; clava usually slightly compressed, longer than two preceding funicle segments combined (as 8:7), with both sutures oblique. Length of flagellum plus pedicellus to width of head as 40:29 (the relative width of frons 14). Surface of head minutely reticulate-granulate (or striate, on gena), frons and scrobes and clypeus almost smooth (and shiny).

Thorax about twice as long as broad, front half moderately narrowing forwards. Pronotum rather long, undivided, but with distinct thin fold along median line. Mesoscutum as long as wide, with small impressions, its surface finely reticulate, fairly shiny, the reticulation extremely delicate on sublateral convex parts, here similar to sculpture of the scutellum. Axillar furrows meeting in the middle. Propodeum in the middle extremely reduced, here about three times narrower (in longitudinal direction) than the metanotum. Mesopleural shield shiny, in its anterior half a shallow squamose sculpture indicated, this sculpture getting much denser behind middle, but so delicate that it is almost imperceptible. Wings fully developed; forewing rather narrow (82:27), finely and densely hairy except for the bare linea calva of medium size and a bare streak from base of wing at its hind margin. Relative lengths: costal cell 27, marginal vein 21, postmarginal vein 18, stigmal vein 9. Stigmal vein with a moderate knob and a narrow uncus hardly as long as width of marginal vein. Legs slender; mid tarsus beneath on either side with a comb of dense pale spines, the basitarsus alone with 13—14 spines in each comb.

Gaster (fig. 29) about as long as head plus thorax, tapering to apex. Hind margin of first gastral tergite deeply incised in the middle, the margins of the following tergites seem to be only shallowly emarginate (they could not be examined properly). Hypopygium reaching two-thirds of length of gaster. Ovipositor sheaths unusually thickly clad with black bristles and also themselves spindle-like in shape, very broad at basal third, tapering toward apex, the exposed part fully as long as two-thirds of gaster, in relation to length of hind tibia as 48:34. For apex of the ovipositor see fig. 32.

Length of body (less ovipositor) 1.9—2.8 mm. (holotype 2.8 mm.).

Male not known.

Host so far unknown. The species seems to be bound to a vegetation of the steppe type.

Distribution: Czechoslovakia, U.S.S.R. (Moldavian SSR, western Kazakhstan).

Holotype (female): Moldavian SSR: Karmanovo, steppe slope with oaks, 14. VI. 1963 (V. I. Talitzki lgt.). Deposited in the Prague National Museum (Entomology), Cat. No. 26.004.

Paratypes (4 ♀♀): Czechoslovakia: Větěřov in SE. Moravia, 3. VII. 1942, 1 ♀ (A. Hoffer lgt.). — Moldavian SSR: Karmanovo, 1 ♀ with the holotype (Talitzki lgt.) — Western Kazakhstan: Janvartsevo district, right bank of the river Ural, 18. VIII. 1950, 2 ♀♀ (M. N. Nikolskaja lgt.).

Eupelmus cavifrons at first glance differs from all other European species of the genus by the peculiar form of head with scrobes extending as far as the inner orbits, and by the part of frons above the scrobes, delimited by a blunted fold, shallowly concave. Unlike many other species of *Eupelmus*, *E. cavifrons* is mainly bluish black with white anelli in the antennae. The only other European species with white-ringed black antennae is *E. hungaricus* Erdős, 1959, in which, however, the ring segment is dark and funicle segments 2—5 white, head normal, ovipositor sheaths shorter than the hind tibia, etc. By its dilated ovipositor sheaths thickly covered with black hair, *E. cavifrons* reminds us of *E. cicadae* Giraud, 1871 (for a figure see Silvestri, 1918, p. 254), but the latter species has the head normal.

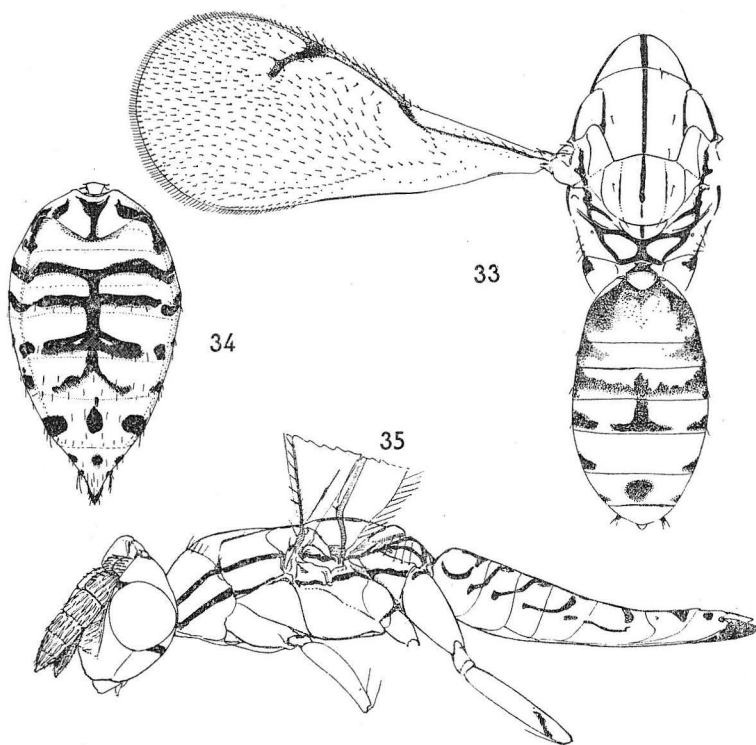
***Cirrospilus talitzkii* Bouček, 1961, Eulophidae**

I described this species from one male reared in Moldavia from *Lithocolletis corylifoliella* Haw. mining an apple-tree leaf. Subsequently I saw further specimens, all females, of *C. talitzkii* in the Leningrad Zoological Institute of the Academy of Sciences. These specimens (mostly in bad condition) come from the Ukraine, Taganrog, where they were collected 26. VI. 1921 by Ahnger.

The female is very similar to the male in the characteristic colouring of head, thorax and the wings, but the abdomen has a richer design (figs. 34 and 35). Antennae are very stout, yellow, pedicellus dorsally with a black spot and short black hairs which extend also dorsally on the first funicle segment. Both funicle segments densely covered with longitudinal sensilla, the first one slightly, the second hardly longer than wide. Abdomen (fig. 34) oval-acuminate, as long as head plus thorax or nearly so. Gastral tergites one to five have one median longitudinal dark line connected with a basal and an apical cross-line, the latter more or less bent forward sublaterally and there connected (more or less) with a lateral dot, which, in side view, extends as an oblique comma laterally forward

and ventral. The lines are often partly broken into dots, the first tergite usually lacks the basal cross-line, but has diverging dark lines along either side from the base; the second tergite mostly lacks the median line. The sixth and seventh tergites have a reduced pattern consisting of a transverse row of three dots. Ovipositor sheaths black on outer, exposed part. Length of body 1.9—2.3 mm.

C. talitzkii belongs to the subgenus *Zagrammosoma* Ashmead, which may be considered probably a good genus characterized by stout flagellum



Figs. 33—35. *Cirrospilus* (*Zagrammosoma*) *talitzkii* Bouček: Fig. 33. Thorax, abdomen and forewing of male (the holotype) showing black design on the pale body. — Fig. 34. Design of female abdomen. — Fig. 35. Body of female in lateral view.

in female, unusually long head (in most dry specimens, however, indistinct owing to the collapsing of these soft body parts) and the stigmal vein unusually prolonged beyond the short uncus (fig. 33). *Cirrospilus* (*Zagrammosoma*) *talitzkii* Bčk. is near to the American *C. (Z.) multilineatus* (Ashm.). The latter differs in having the dark pattern on the abdomen more complicated, the infumation of the wings richer, the cubital and basal folds bearing complete hair-rows and the funicle segments longer in female.

In addition to the new taxa described above I wish to call attention to some nomenclatorial and taxonomic changes.

Eudecatoma stagnalis (Erdős, 1947) is the valid name for *E. fasciata* (Thomson, 1876) nec *Cynips fasciata* Fonscolombe, 1832, transferred to *Eudecatoma* as a synonym of *E. biguttata* (Swederus) by Ghesquière, 1956 (pp. 704—705).

Eurytoma strigifrons auct. clearly differs from the type material of *strigifrons* Thoms. and may prove to be a new species.

Eurytoma verticillata (Fabr.) is the valid name for the species mentioned by Bouček, 1961, under *E. appendigaster* (Swed.).

Eurytoma aspilus (Walker) is the valid name for *phanacidis* Mayr; see Claridge, 1959 (p. 163).

Perilampus masculinus Bčk. is different from *laevifrons* Dalm., in spite of what Kerrich, 1958 (pp. 78—81), says, which I am going to show in a paper on Perilampidae.

According to Dr. Graham's recent study (not yet published) *Cerocephala cornigera* Westwood, according to the actual type, is the same as *C. trichotus* (Ratzeburg) and the species generally known as *cornigera* has to be renamed. Dr. Graham is going to rename it and therefore I mention it above as *C. cornigera* auct.

Miscogaster maculata Walk. and *M. rufipes* Walk. are determined according to the types, not by using Delucchi, 1955.

Seladerma pschorni (Delucchi) is the species with unusually inflated pedicellus in males.

Scutellista obscura (Förster), n. comb., because *Enargopelte* Förster, 1878, is considered a subjective synonym of *Scutellista* Motschulsky, 1859.

Halticoptera circulus (Walk.) is the species mentioned under the invalid name *H. petiolata* Thoms. in Bouček, 1961.

For the *Pachyneuron* species see above under *P. aeneum* Masi.

Homoporus apharetus (Walker, 1839) is the valid name for *H. flaviscapus* Thomson, 1878, *Homoporus subniger* (Walker, 1835) for *H. kurdjumovi* Szelenyi, 1956, and *Homoporus arestor* (Walker, 1848) for *H. chlorogaster* Thomson, 1878. The synonymy was discovered by Dr. Graham's studies of the Walker and Thomson types. I have seen the types in question, as well as *kurdjumovi*, kindly lent me by his author, and agree with Dr. Graham, who explains the mentioned synonymy in a contemporaneous paper. It is a similar case to that of some new combinations used in the present paper, particularly under *Stenomalina* and *Habrocytus*, but not in *Sturovia squamifera* (Thomson), n. comb. In the latter case Dr. H. v. Rosen kindly compared for me the type of *Eutelus (Amblymerus) squamifer* Thomson, 1878, with *Sturovia tenuicornis* Bouček, 1961, and found them conspecific (new synonymy!).

In *Habrocytus* *H. semotus* (Walker) is the valid name for forms mentioned by Bouček, 1961, as *H. eucerus* (Ratz.) and *H. variabilis* (Ratz.).

Dibrachoides dynastes (Förster, 1841) is a valid name, *Pteromalus druso* Walker, 1839, being a *Kranophorus*, in spite of the incorrect synonymization by Graham, 1956 (p. 260).

Euplectromorpha bouceki Erdös is being described by Dr. Erdös as a new species, for *E. laeviscuta*, sensu Erdös, 1956, and Bouček, 1961, has proved to be different from *E. laeviscuta* (Thomson), the types of which I have seen.

Hyssopus Girault, so far taken as a good genus in North America, is considered a mere subgenus of *Elachertus* auct. (unfortunately, *Elachertus* Spinola seems to be, according to the so far valid type-species, a quite different genus!). *E. nigrutilus* [Zetterstedt] and *E. olivaceus* Thomson belong to the subgenus *Hyssopus*.

Abstract. After an introduction containing data on the vegetation and some other factors influencing the fauna of Moldavia, and a short review of the work carried out until 1965, the author enumerates 468 species of Chalcidoidea so far ascertained in this small east-European country. Most of the species belong to the elements of the steppe zone and of the zone of deciduous forests of Eurasia. Some species of the former group are quoted as examples. The paper brings also illustrated descriptions of the following new taxa: *Sphegigaster stepicola* n. sp. from Moldavia, Czechoslovakia, Austria and Algeria, *Schimitschekia populi*, n. gen. n. sp. from Moldavia and Western Germany, *Pachyneuron aeneum* Masi, redescribed from fresh material, *Hemitrichus oxygaster*, n. sp. from Moldavia and Czechoslovakia, *Lariophagus fimbriatus*, n. sp. from Moldavia and Czechoslovakia, *Merisus flagellatus*, n. sp. from Moldavia, *Aggelma agrilli*, n. sp. from Moldavia, *Cyclogastrella clypealis*, n. sp. from Moldavia and Czechoslovakia, *Dibrachys* [*Alloidibrachys* n. subgen.] *hians*, n. sp. from Moldavia, Czechoslovakia and Austria (so far all Pteromalidae), *Eupelmus cavifrons*, n. sp. (Eupelmidae) from Moldavia, Kazakhstan and Czechoslovakia; also female of *Cirrospilus talitzkii* Bčk. (Eulophidae) is described. The European *Cyclogastrella* and most of the European *Dibrachys* are keyed out. At the end explanations are given to some taxonomical and nomenclatorial changes.

Краткое содержание

В этой статье дается список 468 видов хальцид (паразитических перепончатокрылых), найденных до сих пор на территории Молдавской ССР. Более подробные данные по распространению этих видов в Молдавии, по их общему распространению и хозяевам всех видов, большинство которых развиваются паразитически на других насекомых, в том числе на вредителях, публикуются главным образом в двух работах автора в Трудах Молдавского н.-иссл. института садоводства, виноградарства и виноделия (Воицек, 1961b, 1965b) на русском языке. Поэтому здесь (в введении) приведены только общие черты растительности Молдавии, имеющие влияние на фауну хальцид, изучение роли которых для целей биологической борьбы с вредными насекомыми проводится под руководством В. И. Талицкого. В статье также перечислены некоторые из видов типичных для зоны степей и лесостепи. В этом списке приводится около половины видового богатства молдавских хальцид по действительным материалам, но вторая половина их еще не обработана. В работе описываются девять видов, один род и один подрод как новые для науки, большей частью тоже по материалам из некоторых других стран: *Sphegigaster stepicola*, n. sp. из Молдавии, Чехословакии, Австрии и Алжира, *Schimitschekia populi*, n. gen. n. sp. из Молдавии и Западной Германии, *Pachyneuron breve*, n. sp. из Молдавии и Малой Азии, *Hemitrichus oxygaster*, n. sp. из Молдавии и Чехословакии, *Lariophagus fimbriatus*, n. sp. из Молдавии и Чехословакии, *Merisus flagellatus*, n. sp. из Молдавии, *Aggelma agrilli*, n. sp. из Молдавии, *Cyclogastrella clypealis*, n. sp. из Молдавии и Чехословакии, *Dibrachys* [*Alloidibrachys*, n. subgen.] *hians*, n. sp. из Молдавии, Чехословакии и Австрии, *Eupelmus cavifrons*, n. sp. из Молдавии, Западного Казахстана и Чехословакии, и до сих пор неопищенная самка вида *Cirrospilus talitzkii* Воицек по дополнительным материалам полученным из Украинской ССР. Кроме ключа европейских видов родов *Cyclogastrella* Вук. и *Dibrachys* Först. в статье имеются также синонимическо-таксономические заметки по некоторым другим видам.

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