

ANNALES ZOOLOGICI

Tom 37

Warszawa, 15 VIII 1984

Nr 15

Janusz NAST

Notes on some *Auchenorrhyncha* (*Homoptera*), 1-5

[With 7 Text-figures]

Abstract. *Dicranotropis dimorpha* MATS. is transferred to *Cemus* FENN. New synonyms: *Chloriona unicolor* (H.-S.) = *Ch. oranensis* MATS., *Chloriona sicula* MATS. = *Ch. flaveola* LDB. The male genitalia of *Vorago undulata* (LALL.) are described and illustrated. The following new names are introduced: *Brixia synavei* nom. n., *Nilaparvata bis* nom. n., *Idiocerus mitjaevi* nom. n. and *Elphnesopius* nom. n.

1. *Dicranotropis dimorpha* MATS. belongs to *Cemus* FENN. (*Delphacidae*)

Cemus dimorphus (MATSUMURA, 1910), comb. n.

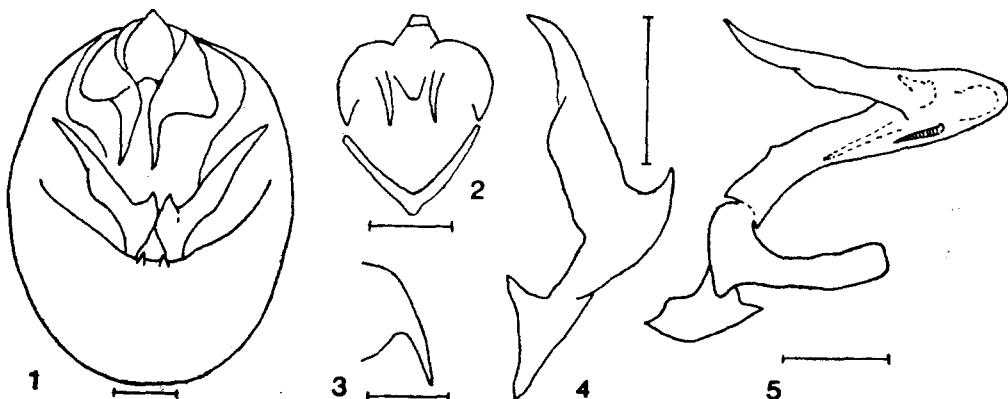
Dicranotropis dimorpha MATSUMURA, 1910, p. 37.

The description given below is based on 3 badly damaged males (one macropterous and two brachypterous) collected in Sicily by S. MATSUMURA and bearing the following labels: "Palermo; MATSUMURA" (printed), and "*Dicranotropis dimorpha* MATS. (in handwriting); det. HORVÁTH" (printed) (from the collection of the Hungarian Natural History Museum, Budapest). They cannot be considered to be the descriptive types but, with no doubt, belonged to a series the part of which served MATSUMURA while describing the species.

Vertex equilateral or slightly shorter submedially than broad at base (1:1.1), broadly rounding into frons, a little narrower at apex than broad at base, lateral margins somewhat prominent. Frons in middle line longer than wide at widest part (2:1), widest just below eyes, lateral margins slightly concave between eyes, median carina forked a little below the level of lower

margin of eyes. Clypeus at base only slightly wider than frons at apex. Ocelli small. Antennae visibly surpassing frontoclypeal suture, basal joint longer than broad (1.5 : 1), second joint considerably longer than first (2.3 : 1). Lateral carinae of pronotum slightly concave, nearly attaining hind margin. Forewings in macropterous specimen considerably longer than broad (3.85 : 1), in brachypters longer than broad (1.9–2.0 : 1). Post-tibial spur elongated (4 : 1), with 1+22 dark tipped teeth arranged in one row.

Aedeagus (Fig. 5) compressed laterally, with a long straight spine on its right side, a shorter straight spine on the left side and a recurrent, somewhat membranous subapical lobe directed cephalad along the dorsal side of aedeagus. Anal processes (Figs. 1–3) not very long, pointed. Suspensorium (a link connecting the base of aedeagal theca with anal segment) in form of a Y-shaped structure (Fig. 2) not encircling the theca. Paramere (Fig. 4) narrowing in its apical portion, pointed at apex, provided with a voluminous process at base.



Figs. 1–5. *Cemus dimorphus* (MATS.). 1 — male genitalia, posterior view, 2 — anal segment and suspensorium, posteroventral view, 3 — anal process, left side, 4 — left paramere, 5 — aedeagus, left side. Scale: 0.1 mm.

Body pale brownish yellow with indistinct darker suffusion. Frons with traces of one or two pairs of pale pustules. Fore wings in macropterous specimen hyaline with fuscous veins, an indistinct light brown suffusion accompanying some of the veins, especially in subapical and apical portion of wing; hind wings in macropterous specimen well developed, hyaline with fuscous veins. Fore wings in brachypters opaque, dark brown; hind wings reduced.

Dimensions. Total length in macropterous specimen 2.95 mm. Length of posterior tibia 0.8 mm, length of post-tibial spur 0.26 mm. Length of macropterous fore wing 2.50 mm, width 0.65 mm; length of brachypterous fore wing 1.0 mm, width 0.5 mm.

The representatives of the genus *Cemus* FENNAH, 1964 have a fairly wide distribution in the Old World. Besides the above named, the genus contains so far the following 8 species: *C. granulinervis* (STÅL, 1854) (Micronesia), *C.*

kirkaldyi (METCALF, 1943) (= *Phacalastor koebelei* KIRKALDY, 1906) (Australia, and noted also from Indonesia, Philippine Is., New Guinea, Melanesia and Polynesia), *C. pulchellus* (DISTANT, 1912) (India, Ceylon), *C. nigromaculosus* (MUIR, 1917), (Philippine Is., New Guinea, Melanesia, Japan), *C. sauteri* (MUIR, 1917) (Ceylon, Taiwan, Viet-nam), *C. leviculus* FENNAH, 1964 (Seychelles, Mauritius, and recently published by LINNAUORI, 1973 from Sudan), *C. viator* FENNAH, 1969 (Sudan), and *C. hipponeax* FENNAH, 1969 (Sudan). *Cemus* FENN. seems to be closely related to the Old World genera *Phacalastor* KIRKALDY, 1906, *Peliades* JACOBI, 1928, *Thriambus* FENNAH, 1964 and *Euidopsis* RIBAUT, 1948. Unfortunately, the limits between them still remain obscure and depend more on the systematic sense of the student than on the real relationship. It is not unlikely that *C. dimorphus* (MATS.) could be a member of the genus *Euidopsis* RIB.

2. *Chloriona oranensis* MATS. and *Ch. sicula* MATS. (*Delphacidae*)

By the courtesy of Dr. S. TAKAGI (Sapporo, Japan), the present author was able to examine the type-series of two Mediterranean species described in 1910 by S. MATSUMURA, viz.: *Chloriona oranensis* from Algeria and *Ch. sicula* from Sicily. The first of them appeared to be synonymous with *Ch. unicolor* (H.-S.), the second is a separate species.

Chloriona unicolor (H.-S.), sensu ASCHE 1982.

Delphax unicolor HERRICH-SCHÄFFER, 1835.
Chloriona oranensis MATSUMURA, 1910, syn. n.
Chloriona canariensis LINDBERG, 1954.
Chloriona edwardsi LE QUESNE, 1960.

The type-series of *Ch. oranensis* MATS. consists of 5 macropterous males and 4 brachypterous females, all mounted on micro-pins stuck into a block of elder pith, and provided with the following labels (in handwriting): "Oran; 7/14", and "*Chloriona oranensis*; sp. n.". One dissected male is herewith selected lectotype. The specimens have been removed from the pith and located on blocks in three pins: one bearing the lectotype (dissected), one with a male paralectotype (macerated in caustic potash), and one with the remaining paralectotypes (3 males and 4 females). The original labels are located on the lectotype, and the paralectotypes bear the xerocopies of the original labels.

There is no doubt that *Chloriona oranensis* MATS. is conspecific with *Ch. unicolor* (H.-S.) originally described from Bavaria and known to occur in F. R. Germany, Austria, Hungary, Spain, Morocco, France, Italy (incl. Sicily), Yugoslavia, Greece (incl. Crete), Turkey and Canary Is. (according to ASCHE, 1982a).

The species in question was recorded also from England, Ireland, Portugal, Tunisia, Switzerland, Moravia, m. and s. Russia, Ukraine (Crimea), Moldavia, Kazakhstan, Uzbekistan, Kirghizia, Georgia, Tuva, Mongolia and Afghanistan (various, not always reliable faunistic data in the literature). The genitalia of *Ch. unicolor* (H.-S.) have been accurately illustrated by ASCHE (1982a).

Chloriona sicula MATS.

Chloriona sicula MATSUMURA, 1910.

Chloriona flaveola LINDBERG, 1948, sensu ASCHE 1982, *syn. n.*

The type-series of *Ch. sicula* MATS. consists of 1 macropterous male and 3 macropterous females, all mounted on micro-pins, stuck into a block of elder pith, and provided with the following labels: "Siracusa MATSUMURA" (printed) and "*Chloriona sicula* n. sp." (handwriting). The male, in very bad condition, is herewith selected lectotype and marked with a red round piece of paper. Its genitalic structures are glued on a piece of paper and located below the pith.

The lectotype of *Ch. sicula* MATS. proved to be the same species as described by LINDBERG from Canary Is. Its genitalia are in full conformity with the figures published by ASCHE (1982a). The tip of the paramere is similar to that of the specimen from Isteiner Klotz (Fig. 4 in the paper of ASCHE).

Ch. sicula (under the name *Ch. flaveola* LDB.) was recorded from Cyprus (type-locality of *Ch. flaveola*), northern Morocco, Spain, F. R. Germany, Austria, France, Italy (incl. Sicily), Bulgaria, Greece (excl. Crete and Peloponnesus) and Turkey (Anatolia) (according to ASCHE 1982a). Moreover *Ch. flaveola* was recorded from Israel, Egypt and Kazakhstan (various faunistic data in the literature).

3. On *Tettigometra fasciata* (RAMB.) (*Tettigometridae*)

The name *Tettigometra fasciata* has usually been attributed to FIEBER. In a paper devoted to European *Tettigometra* (1965) FIEBER described several forms, among them 11 new species provided with his name, and 3 species (*T. picta*, *T. griseola*, *T. fasciata*) without any author's name. The specimens (from Spain) of the last species obtained FIEBER from the collection of E. FREY-GESNER; as he says, they had been determined by L. R. MEYER-DÜR, and his name, not of FIEBER, was cited as the author of species in all papers published by FIEBER. As regards *T. fasciata*, MEYER-DÜR apparently determined his material on the ground of a paper by RAMBUR (1840) who described a new species, *Mijas fasciata*, recently revised and referred by WEBB (1979) to *Tet-*

tigomera. The paper of RAMBUR was apparently unknown to FIEBER. Thus, the form described by FIEBER should not be treated as a new species intentionally established by him, and the synonymy of *T. fasciata* (RAMB.) should run as follows: *Tettigometra fasciata* (RAMBUR, 1840) = *Mijas fasciata* RAMBUR, 1840 = *Tettigometra fasciata*: FIEBER, 1865 and subsequent papers. If the name were attributed to FIEBER, it should be changed as a secondary homonym.

4. The genitalia of *Vorago undulata* (LALL.) (*Cercopidae*)

Four species of the genus *Vorago* FENNAH, 1949 are known till now. The genitalia of three of them were published by FENNAH (1949a, 1949b). During my stay in London I had an opportunity to study a microscopic slide of *Sphenorhina undulata* LALLEMAND, 1924 (now *Vorago*) made by C. B. WILLIAMS and preserved in the British Museum (Nat. Hist.). The slide contains the aedeagus and pygofer (Figs. 6, 7) and is a little flattened; the parameres have apparently been lost. Aedeagus with two pairs of comparatively long and slender processes: one pair attached subapically and directed posteriorly, another much shorter pair attached just below the apex, opposite to the first pair and directed ventrad.

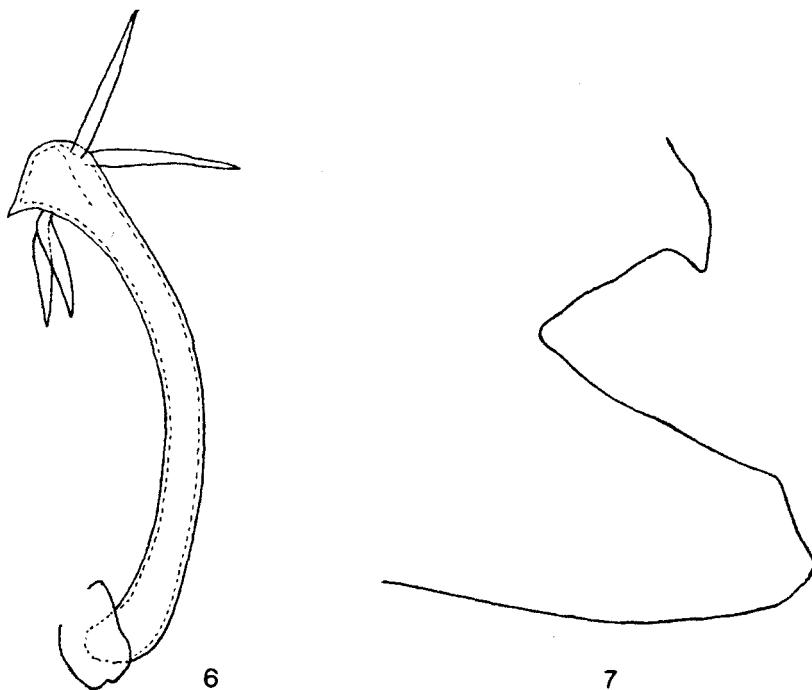


Fig. 6 and 7. *Vorago undulata* (LALL.), holotype. 6 — aedeagus, left side, 7 — pygofer, left side.

5. New names in the *Auchenorrhyncha*

Brixia synavei nom. n. (Cixiidae).

Brixia mauritii SYNAVE, 1960 nec *Brixia mauritii* STÅL, 1859, primary homonym.

Although the name *Brixia mauritii* STÅL, 1859 was unnecessarily introduced as a substitute name for *Delphax bohemani* STÅL, 1854 nec 1858, it has not lost availability. Judging by descriptions and illustration, *B. mauritii* STÅL and *B. synavei* nom. n. belong to two distinct species. The species confined only to Mauritius is here named in honour of the late Henri SYNAVE (Brussel) who contributed so much to the knowledge of Ethiopian *Fulgoroidea* and *Coccoidea*.

Nilaparavata bis nom. n. (Delphacidae).

Nilaparvata muiri CALDWELL and MARTORELL, 1951 nec *Nilaparvata muiri* CHINA, 1925, primary homonym.

The species described by CALDWELL from Puerto Rico does not belong to *Nilaparvata* DIST. (which is an Old World genus); nevertheless the name has been preoccupied by the species described by CHINA.

Idiocerus mitjaevi nom. n. (Cicadellidae).

Idiocerus pallidus MITJAEV, 1970 nec *Idiocerus pallidus* FITCH, 1851, primary homonym.

Elphnesopius nom. n. (Cicadellidae)

Neophlepsius DUBOVSKY, 1966 nec *Neophlepsius* LINNAUORI, 1955, preoccupied.

The anagrammatic new name is masculine in gender. It seems that a period of 12 years has been a sufficiently long time since the present writer notified (in 1972) the homonymy in the two last names.

Note. The preoccupied generic name *Acharista* EMELJANOV, 1968 (Cicadellidae) nec *Acharista* MELICHAR, 1924 is to be superseded by *Gobicuellus* DLABOLA, 1967 since their type-species (*A. nudiventris* EMELJANOV, 1968 and *G. dzadagadus* (DLABOLA, 1967, receptively) proved to be subjective synonyms (EMELJANOV 1977).

REFERENCES

- ASCHE M. 1982a. Intraspezifische Variabilität der ♂-Genitalarmatur, dargestellt am Beispiel der *Chloriona*-Arten *Ch. flaveola* LINDBERG, 1948, *Chl. unicolor* (HERRICH-SCHÄFFER 1835) und *Chl. ponticana* nov. spec. (Homoptera Cicadina Delphacidae). Marb. Ent. Publ., Marburg, 1 (6): 159–190, 6 figs.
 ASCHE M. 1982b. Zur Kenntnis von *Euidopsis truncata* RIBAUT, 1948 (Homoptera Cicadina Delphacidae). Marb. Ent. Publ., Marburg, 1 (6): 211–229, 7 figs.

- CALDWELL J. S., MARTORELL L. F. 1951. Review of the Auchenorrhynchous Homoptera of Puerto Rico. Part II. The Fulgoroidea except Kinnaridae. *Journ. Agric. Univ. Puerto Rico, Rio Piedras*, **34** (2): 133-269 + I-X, 54 pls.
- CHINA W. E. 1925. The Hemiptera collected by Prof. J. W. GREGORY's expedition to Yunnan, with synonymous notes on allied species. *Ann. Mag. Nat. Hist., London*, (9) **16**: 449-485, 5 figs.
- DLABOLA J. 1967. Ergebnisse der 2. mongolisch-tschechoslowakischen entomologisch-botanischen Expedition in der Mongolei. Nr. 12. Reisebericht. Lokalitätenübersicht und Bearbeitung der gesammelten Zikaden. *Acta faun. ent. Mus. Nat. Pragae, Praha*, **12**: 207-230, 4 pls., 36 figs.
- DUBOVSKY G. K. 1966. Cikadovye (*Auchenorrhyncha*) Ferganskoy doliny. Tashkent, 256 pp., 72 figs.
- EMELJANOV A. F. 1968. Two new genera of leaf-hoppers (*Homoptera, Cicadellidae*) from Mongolia. *Rev. Ent. USSR*, **47** (1): 147-150, 8 figs.
- EMELJANOV A. F. 1977. Leaf-hoppers (*Homoptera, Auchenorrhyncha*) from the Mongolian Peoples' Republic based mainly on materials of the Soviet-Mongolian zoological expeditions (1967-1969). *Insects of Mongolia*, **5**. Leningrad. Pp. 96-105, 10 figs.
- FENNAH R. G. 1949a. New genera and species of Neotropical Cercopidae (*Homoptera*). *Ann. Mag. Nat. Hist., London*, (12) **1**: 605-620, 5 figs.
- FENNAH R. G. 1949b. Autecological notes on three species of *Aeneolamia* (*Homoptera, Cerco-poidea*). *Ann. Mag. Nat. Hist., London*, (12) **2**: 703-726, 11 figs.
- FENNAH R. G. 1964a. *Delphacidae* from Madagascar and the Mascarene Islands (*Homoptera: Fulgoroidea*). *Trans. R. Ent. Soc., London*, **116** (7): 131-150, 12 figs.
- FENNAH R. G. 1964b. *Delphacidae* (*Homoptera, Fulgoroidea*) from the Sudan Republic. *Acta ent. Fenn., Helsinki*, **26**: 79 pp., 266 figs.
- FIEBER F. X. 1865. Synopse der europ. Arten *Tettigometra*. *Verh. zool.-bot. Ges. Wien*, **15**: 561-572.
- FITCH A. 1851. Catalogue with references and descriptions of the insects collected and arranged for the State Cabinet of Natural History. *Ann. Rep. State Cab. Nat. Hist., Albany, N.Y.*, **4**: 43-69.
- LALLEMAND V. 1924. Notes sur les Cercopides de l'Amérique Centrale et Méridionale de la collection de M. C. B. WILLIAMS et de la mienne. *Ann. Mag. Nat. Hist., London*, (9) **14**: 477-486.
- LINDBERG H. 1948. On the insect fauna of Cyprus. Results of the expedition of 1939 by Harald, Håkan and P. H. LINDBERG. II. *Heteroptera* und *Homoptera Cicadina* der Insel Zypern. *Comm. Biol., Helsingfors*, **10** (7): 23-175, 54 figs.
- LINDBERG H. 1954. Hemiptera Insularum Canariensium. Systematik, Ökologie und Verbreitung der Kanarischen Heteropteren und Cicadinen. *Comm. Biol., Helsingfors*, **14** (1): 1-304, 73 figs.
- LINNAUVOI R. 1955. Contributions to the neotropical leafhopper fauna of the family *Cicadellidae*. *Ann. ent. Fenn., Helsinki*, **21**: 113-129, 7 figs.
- LINNAUVOI R. 1973. Hemiptera of the Sudan, with remarks on some species of the adjacent countries 2. *Homoptera auchenorrhyncha: Cicadidae, Cercopidae, Machaerotidae, Membracidae and Fulgoroidea*. *Not. ent., Helsinki*, **53** (3): 65-137, 84 figs.
- MATSUMURA S. 1910. Neue Cicadinen aus Europa und Mittelmeergebiet. (Schluss). *Journ. Coll. Sci. Tokyo*, **27** (18): 1-38, 13 figs.
- METCALF Z. P. 1943. *Fulgoroidea*, part 3 *Araeopidae* (*Delphacidae*). General Catalogue of the Hemiptera, Northampton, Mass., **4**, 552 pp.
- MITJAEV I. D. 1970. Cikady (*Homoptera, Idiocerinae*), povrezhdayushchie dereva i kustarniki v Alma-Atinskem zapovednike. *Trudy alma-atinsk. gos. Zapov., Alma-Ata*, **9**: 217-227, 20 figs.

- NAST J. 1972. Palaearctic *Auchenorrhyncha* (*Homoptera*), an annotated check list. Warszawa, 550 pp.
- RIBAUT H. On the insect fauna of Cyprus. Results of the expedition of 1939 by Harald, Håkan and P. H. LINDBERG. III. Homoptères nouveaux de Chypre. Comm. Biol., Helsingfors, **10** (8): 1–14, 44 figs.
- STÅL C. 1854. Nya *Hemiptera*. Öfv. Svenska Vet. Akad. Förh., Stockholm, **11**: 231–255.
- STÅL C. 1858. Nya Svenska *Hemiptera*. Öfv. Svenska Vet. Akad. Förh., Stockholm, **15**: 355–358.
- STÅL C. 1859. Hemiptera. In: Kongliga Svenska Fregatten Eugenies resa omkring jorden. Stockholm. Zoologi. **4**: 219–298, 2 pls.
- SYNAVE H. 1960. Contribution à la connaissance des Fulgoroïdes de l'île Maurice. Bull. Inst. Sci. Nat. Belgique, Bruxelles, **36** (36): 1–12, 19 figs.
- WEBB M. D. 1979. Revision of RAMBUR'S *Homoptera* species from the types in the British Museum. Ann. Soc. ent. France, (n. s.) **15** (1): 227–240, 57 figs.

Instytut Zologii PAN
ul. Wilecka 64
00-679 Warszawa

STRESZCZENIE

[Tytuł: Uwagi o niektórych *Auchenorrhyncha* (*Homoptera*), 1–5]

Dicranotropis dimorpha MATS. przeniesiono do rodzaju *Cemus* FENN. Ustanowiono następujące synonimy: *Chloriona unicolor* (H.-S.) = *Ch. oranensis* MATS.; *Chloriona sicula* MATS. = *Ch. flaveola* LDB. Opisano i zilustrowano genitalia *Vorago undulata* (LALL.). Wprowadzono następujące nowe nazwy: *Brixia synavei* nom. n., *Nilaparvata bis* nom. n., *Idiocerus mitjaevi* nom. n. i *Elphnesopius* nom. n.

РЕЗЮМЕ

[Заглавие: Замечания о некоторых *Auchenorrhyncha* (*Homoptera*), 1–5]

Автор перенес *Dicranotropis dimorpha* MATS. в род *Cemus* FENN. Установил следующие синонимы: *Chloriona unicolor* (H.-S.) = *Ch. oranensis* MATS.; *Chloriona sicula* MATS. = *Ch. flaveola* LDB. Описал и иллюстрировал гениталии *Vorago undulata* (LALL.). Ввел следующие новые названия: *Brixia synavei* nom. n., *Nilaparvata bis* nom. n., *Idiocerus mitjaevi* nom. n. и *Elphnesopius* nom. n.