

## A Contribution to the Knowledge of Heteropterous Fauna of Balkan Peninsula

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Although the heteropterous fauna of Balkan Peninsula has been studied rather intensively (of the modern authors e. g. Kormilev 1937, 1938, 1939 etc. lot of papers by Josifov, Novak & Wagner 1951, Gogala & Moder 1960 and many others), the Balkans still belong to relatively less investigated European areas. A faunistic review of heteropterous species which had been recorded from various Balkan countries was given by Josifov (1970).

Among the material of Heteroptera, collected mainly by the author, several species, interesting from the faunistic point of view, were found. 27 species are included in the following portion of the paper, 11 of which are newly recorded for the fauna of Yugoslavia (*Mesovelia vittigera*, *Auchenocrepis reuteri* f. *jakowlewi*, *Macrolophus geranii*, *Lasiacantha gracilis*, *Tingis sideritis*, *Agramma minutum*, *Piesma silenes*, *Piesma rotundatum*, *Geocoris grylloides*, *Geocoris pubescens*, *Eremocoris obscuratus*). 4 species were already quoted from Yugoslavia but only from North Slovenia (*Stenodema holsatum*, *Acompocoris alpinus*, *Dicthyonota strichnocera*, *Nithaecus jacobae*). 3 species are new to the fauna of Bulgaria (*Agramma intermedium*, *Piesma silenes*, *Rhyparochromus validus*), 1 species to the fauna of Greece (*Lasiacantha mediterranea*) and 1 species is newly recorded for Balkan Peninsula (*Piesma silenes*).

If not mentioned otherwise, the specimens were collected by the author and they are deposited in author's collection.

### Mesoveliidae

#### *Mesovelia vittigera* Horváth, 1895

S. W. Yugoslavia: Monte Negro, Bar (Antivari), Aug. 22, 1969, 1 macropterous and 6 apterous specimens, among vegetation of a half dried brook near the sea beach.

The species is distributed in the Mediterranean subregion (Canary Islands, S. France, Sicily, Albania, N. Africa, Turkey, Syria) and also in the Ethiopian, Malagasy, Oriental and Australian regions. New to the fauna of Yugoslavia.

### Miridae

#### *Stenodema holsatum* (Fabricius, 1787)

S. Yugoslavia: Macedonia, Pelister near Bitola, 1600 m, Aug. 13, 1974, 1 specimen swept from grassy vegetation.

It is known from North and Middle Europe, Italy, Sardinia, U.S.S.R. (forest zone of European portion, Caucasus, Turkmenia, Siberia), Algeria and in the

Balkans recorded from Bulgaria, Albania and North Yugoslavia (Slovenia — Gogala & Moder, 1960). Newly recorded from S. Yugoslavia.

***Auchenocrepis reuteri* Jakovlev f. *jakowlewi* Stichel, 1956**

S. Yugoslavia: Macedonia, about 4 km N. of Gradsko, Aug. 8, 1974, the bank of Vardar river, on *Tamaryx* sp., 8 specimens.

The species was recorded from U.S.S.R. (S. Ukraine, Caucasus, Turkmenia), Iran, Irak, Turkey, Greece and Bulgaria. New to the fauna of Yugoslavia.

***Macrolophus geranii* Josifov, 1961**

S. Yugoslavia: Macedonia, Pelister near Bitola, 1200 m, Aug. 12, 1974, 1 specimen swept.

The specimen (♀) quite agrees with Josifov's (1961) description and its synthlipsis is about 3.2 times wider than eye. The species was described and known only from Bulgaria. New to the fauna of Yugoslavia.

**Anthocoridae**

***Acomporis alpinus* Reuter, 1875**

S. Yugoslavia: Macedonia, Pelister near Bitola, 1600 m, Aug. 13, 1974, 1 ♂; 1200 m, Aug. 12, 1974, 1 ♂ on *Pinus* sp.

The species is known from North, Middle and South Europe (Italy, Rumania, Bulgaria, Crimea), Caucasus, N. Ural, Transbaikalia, Altai and N. Siberia. From Yugoslavia recorded only from the North (Croacia) by Péricart (1972). Newly recorded from S. Yugoslavia.

**Tingidae**

***Dictyonota strichnocera* Fieber, 1844**

S. Yugoslavia: Macedonia, Pelister near Bitola, 1600 m, Aug. 13, 1974, 10 specimens on *Cytisus* sp.

It is distributed in many European countries. From the Balkans recorded from Bulgaria (findings data summarized by Josifov, 1964b) and Albania (Josifov, 1970), in Yugoslavia quoted only from Slovenia ("Carniolia") by Gogala & Moder (1960). Newly recorded from S. Yugoslavia.

***Lasiacantha gracilis* (Herrich-Schaeffer, 1830)**

S. Yugoslavia: Macedonia, about 4 km E. of Prilep, Aug. 11, 1974, 5 specimens on a stony steppe on *Thymus* sp.

The species is known from Germany, Czechoslovakia (Slovakia), Switzerland, Austria, Hungary, S. France, Italy, Bulgaria, Turkey and U.S.S.R. (Ukraine, Kazakhstan, Dagestan, Transcaucasus). New to the fauna of Yugoslavia.

***Lasiacantha mediterranea* Štusák, 1971**

Greece: S. Peloponnese, Mt. Taigetos, Goynari, June 11–12, 1974, 1 specimen, leg. J. Horák & V. Švihla.

The species was described from Yugoslavia (Monte Negro) and later recorded from U.S.S.R. (Crimea) by Putshkov (1974). New to the fauna of Greece.

### **Tingis sideritis Štusák, 1973**

S. Yugoslavia: Macedonia, about 4 km E. of Prilep, Aug. 11, 1974, 1 adult and several nymphs on *Sideritis montana*.

The species is known from Bulgaria and U.S.S.R. (Crimea, Caucasus) (Štusák, 1973). New to the fauna of Yugoslavia.

### **Dictyla convergens (Herrich-Schaeffer, 1839)**

S. Bulgaria: foot of Pirin Mts., about 3 km W. of Bansko, July 19, 1973, 4 adults and many nymphs on *Myosotis* sp. together with *Dictyla lupuli* (H.-S.).

The species occurs almost in whole Europe and Tunisia? In the Balkans it was recorded from Yugoslavia, Rumania and from Bulgaria by Štusák (1976).

### **Agramma intermedium (Wagner, 1940)**

S. Bulgaria: foot of Pirin Mts., about 3 km W. of Bansko, July 19, 1973, 17 adults and many nymphs on *Juncus* sp.

The species is distributed in Middle and South Europe, it is also known from Turkey. New to the fauna of Bulgaria.

### **Agramma minutum Horváth, 1874**

S. Yugoslavia: Shar Planina Mts., Prelovac, 1540 m, Aug. 18, 1974, 18 adult specimens under grassy vegetation on a forest-steppe exposed to south.

The species was recorded from France, Germany, Czechoslovakia, Austria, Hungary, Rumania, Bulgaria and U.S.S.R. (Moldavia, Ukraine, Caucasus, W. Kazakhstan, Altai, Siberia). New to the fauna of Yugoslavia.

## **Piesmatidae**

### **Piesma silenes Horváth, 1888**

S. Bulgaria: Pirin Mts., about 5 km W. of Bansko, July 19, 1973, 2 ♂ swept on a small clearing among pine-forest (det. E. Heiss).

S. Yugoslavia: Macedonia, Pelister near Bitola, 1200 m, Aug. 12, 1974, 1 ♂ swept on a forest steppe.

The species is known from Hungary, Czechoslovakia, Germany (Bavaria), Austria (Tirol) and Italy (Heiss 1972). Heiss (1971) interprets former records and material identified as *P. silenes* from Turkey, S. Russia and from the Balkans as *Piesma salsolae* Beck.

New to the fauna of Bulgaria, Yugoslavia and to Balkan Peninsula.

### **Piesma rotundatum Horváth, 1906**

S. Yugoslavia: Macedonia, Pelister near Bitola, 1200 m, Aug. 12, 1974, 11 specimens on *Herniaria glabra* L.

S. Yugoslavia: Macedonia, about 8 km E. of Debar, Aug. 17, 1974, 1 specimen on *Herniaria glabra* L.

The species occurs in Spain, Morocco, Algeria, Tunisia, Switzerland, Greece, Bulgaria and Syria. New to the fauna of Yugoslavia.

## Lygaeidae

### **Nithaeus jacobae** (Schilling, 1829)

S. Yugoslavia: Macedonia, Pelister near Bitola, 1600 m, Aug. 13, 1974, 2 specimens swept.

It is widely distributed in Europe and Siberia. In the Balkans recorded from Rumania, Bulgaria and Albania, in Yugoslavia known only from N. Slovenia (the Julske Alps) (Gogala & Moder 1960). Newly recorded from S. Yugoslavia.

### **Geocoris grylloides** (Linnaeus, 1761)

S. Yugoslavia: Macedonia, Pelister near Bitola, 1200 m, Aug. 12, 1974, 2 specimens crawling on the ground on a forest steppe.

The species is widely distributed almost in whole Europe, Algeria, Turkey, Caucasus, Kazakhstan, Kirgizia, Turkestan, Siberia and China. New to the fauna of Yugoslavia.

### **Geocoris pallidipennis** (Costa, 1843)

S. Yugoslavia: Macedonia, env. Ljubojno, east coast of Prespansko Lake, Aug. 14, 1974, 3 specimens crawling on the sandy beach of the lake among sporadical vegetation.

The species is distributed in many countries of Europe, N. Africa, Near East and in the Oriental region. In the Balkans recorded from Rumania, Bulgaria and Yugoslavia. It is unknown from Greece and Albania but its occurrence in these countries is very probable as the above cited locality lies very close to the boundary-line of these countries.

### **Geocoris pubescens** (Jakovlev, 1871)

S. Yugoslavia: Macedonia, about 4 km E. of Prilep, Aug. 11, 1974, 1 specimen crawling on the ground.

This pontomediterranean species is known from Rumania, Bulgaria, Turkey, Iran, U.S.S.R (S. Ukraine, Caucasus, Kazakhstan, Kirgizia, Uzbekistan) and W. China. It is new to the fauna of Yugoslavia.

### **Drymus pilipes** Fieber, 1861

S. Yugoslavia: Macedonia, env. Ljubojno, east coast of Prespansko Lake, Aug. 14, 1974, 2 specimens on the sandy beach of the lake crawling among low vegetation.

The species is known from many European countries and from the Near East. In the Balkans recorded from Greece, Yugoslavia and recently from Bulgaria (Josifov 1974). It is unknown from Albania but its occurrence is very probable as the above cited locality is very close to the border of this country.

### **Eremocoris obscuratus** Montandon, 1895

S. Yugoslavia: Macedonia, Pelister near Bitola, 1600 m, Aug. 13, 1974, 1 specimen under stone.

The species was recorded only from Rumania and it is new to the fauna of Yugoslavia.

### **Pionosomus opacellus** Horváth, 1895

S. Yugoslavia: Macedonia, about 4 km E. of Prilep, Aug. 11, 1974, 1 specimen crawling on the ground.

The species is distributed in Denmark, Germany, Czechoslovakia, Holland, Hungary, Rumania, Bulgaria, U.S.S.R. (Ukraine, Russia, Caucasus, Kazakhstan, Kirgizia, Siberia ?), from Yugoslavia was recorded by Kormilev (1939).

### **Pezocoris apicimacula** (Costa, 1852)

S. E. Bulgaria: 5 km W. of Mitshurin, July 22, 1973, 1 specimen on a forest steppe crawling on the ground.

S. W. Bulgaria: env. of Melnik, Aug. 4, 1971, 1 specimen.

The species occurs in Morocco, Algeria, Spain, Italy, Corfu Isl., Greece, Turkey, U.S.S.R. (Crimea, Russia, Caucasus, Turkestan), Syria, Israel, in Bulgaria recorded from Petritsh (Josifov 1963) and Topolovgrad (Josifov 1964 a).

### **Rhyparochromus (Graptopeltus) validus** Horváth, 1875

S. E. Bulgaria: 2 km N. W. of Achtopol, July 27, 1973, 1 spec. on the ground under dry leaves of *Quercus* sp.

The species was recorded from Czechoslovakia (Slovakia), Hungary, Yugoslavia, Greece, Turkey, Syria, Iran and U.S.S.R. (Crimea, Caucasus). New to the fauna of Bulgaria.

## Pentatomidae

### **Trochiscocoris rotundatus rotundatus** Horváth, 1895

S. Bulgaria: Harmanli, June 9, 1974, 1 specimen, leg. O. Marek.

In the Balkans known from Rumania, Yugoslavia and Bulgaria (Josifov 1963).

### **Acrosternum heegeri** Fieber, 1861

S. W. Bulgaria: Sandanski, July 9–11, 1974, 1 specimen swept from *Quercus* sp., leg. A. Hoffer.

This species of holomediterranean distribution reaching also to the Ethiopian region is known in the Balkans from Greece, Yugoslavia and S. W. Bulgaria (from Krasnensko defile and Kulata recorded by Josifov 1974).

## References

- Gogala, M. & Moder, A., 1960: Prispevek k poznavanju favne stenic Slovenije (Hemiptera-Heteroptera). *Biološki vestnik*, Ljubljana, 7:85–99.
- Heiss, E., 1971: Zur Taxonomie und Verbreitung von *Piesma silenes* Horv. 1888 (Heteroptera, Piesmatidae). *Nachrbl. Bayer. Ent.*, 20:17–26.
- Heiss, E., 1972: *Piesma silenes* Horv. und *Piesma salsolae* Beck. neu für Italien (Heteroptera, Piesmatidae). *Boll. Soc. ent. ital.*, 104:62–68.
- Josifov, M., 1961: *Macrolophus nubilis geranii* n. subsp. (Hem. Het. Miridae). *Compt. rend. Acad. Bulg. sci.*, 14:87–89.
- Josifov, M., 1963: Polukrili nasekomi (Heteroptera) ot okolnostite na Petritsch (jugozapadna Balgarija). *Bull. Inst. zool. Acad. sci. Bulg.*, 13:93–132.
- Josifov, M., 1964 a: Heteroptera aus der Thrakischen Tiefebene. Die Fauna Thraikiens, 1:207–246. *Bul. Acad. sci.*, Sofia.

- Josifov, M., 1964 b: Vidov sastav i razprostranenie na nasekomite ot razred Heteroptera v Balgarija. Chast II. *Bull. Inst. zool. mus. Acad. sci. Bulg.*, 16:38–150.
- Josifov, M., 1970: Ergebnisse der Albanien-Expedition 1961 des Deutschen Entomologischen Institutes. 82. Beitrag. Heteroptera. *Beitr. Ent.*, 20:825–956.
- Josifov, M., 1974: Khemipterologichno saobshchenie V. *Bull. Inst. zool. mus. Acad. sci. Bulg.*, 40:217–221.
- Kormilev, A. N., 1937: 1. Prilog poznavanju Hemiptera-Heteroptera Jugoslavie. Juzhna Srbija i Srbija. *Bull. Soc. sci. Skoplje*, 17:29–54.
- Kormilev, A. N., 1938: II. Beitrag zur Kenntnis der Verbreitung jugoslavischer Hemiptera-Heteroptera. *Bull. Soc. sci. Skoplje*, 18:167–172.
- Kormilev, A. N., 1939: III. Beitrag zur Kenntnis der Verbreitung jugoslavischer Hemiptera-Heteroptera. *Ann. Mus. Serb. merid. Skoplje*, 1:21–29.
- Novak, P. & Wagner, E., 1951: Prilog poznavanju fauna Hemiptera Dalmacije (Hemiptera-Heteroptera). *Godišnjak biol. Inst. Saraj.*, 4:59–80.
- Péricart, J., 1972: Hémiptères Anthocoridae, Cimicidae et Microphysidae de l'ouest-paléarctique. Faune de l'Europe et du bassin méditerranéen, 7. Paris, Masson et Cie, 402 pp.
- Putschkov, V. G., 1974: Fauna Ukraini, Tom 21, vip. 4: Beritidi, chervonoklopi, piezmatidi, pidkorniki i tingidi. Kii, Naukova dumka, 332 pp.
- Štusák, J. M., 1973: *Tingis sideritis* sp. n. from Bulgaria (Heteroptera, Tingidae). *Acta ent. bohemoslov.*, 70:196–204.
- Štusák, J. M., 1976: Interesting findings of Heteroptera in Bulgaria. *Terrestrial fauna of Bulgaria. Materials. Bulg. Acad. sci., Sofia* 1976:191–200.
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