

**AMIOTA (PHORTICA) GOETZI SP. N. (DIPTERA, DROSOPHILIDAE)
WITH FAUNISTIC NOTES TO DROSOPHILIDAE, ODINIIDAE AND
PERISCHELIDIDAE FROM SOUTHEASTERN EUROPE AND TURKEY**

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The present paper deals with the unpublished material of Drosophilidae (more than 600 specimens) scattered in various collections, including that of author. Faunistic data from the countries concerned were hitherto negligible (Albania, Bulgaria, Turkey) or obsolete at most part (Roumania, South of European USSR); in Yugoslavia, recent faunistic studies are limiter to only several localities as yet. For detailed information see Bächli & Rocha Pité (1982, 1984), additional faunistic notes have been given by Bächli & Kekić (1983a, b), Beschovski (1972, 1975), Kekić & Bächli (1981, 1983), Kozarov (1908), Nedelkov (1912) and Pelov & Trenchev (1973). This imperfect state of faunistic research allowed the finding of new species to each of the inspected countries except Yugoslavia and one species new to science. About half of the number of specimens studied were collected by the author, during holidays in Yugoslavia, Roumania, Bulgaria and USSR.

Collections made by the author are quoted without name of collector. Public collections surveyed, their abbreviations used in the text and collecting methods applied: Moravian Museum, Dep. of Entomology, Brno (MMB) — sweeping. National Museum, Dep. of Entomology, Praha (NMP) — sweeping. Zoological Museum, Moskva (ZMM) — rearing from fungi. Zoological Museum, Zürich (ZMZ) — collecting on fruit bait. Specimens of the personal collections of Dr. M. Barták and Ing. V. Martinek were collected by sweeping and those of the personal collection of Dr. P. Lauterer were attracted to beer traps. Collecting methods of the remaining material are specified under Description of localities. Data of collecting are summarized by months, except data of the type series of new species. Species recorded for the first time from particular countries are marked by asterisk.

Names of Roumanian localities are given without special diacritic marks used in Roumania. Bulgarian and Russian names are transcribed from Russian alphabet according to Westermann — Rand McNally Co. (Eds.): The international atlas, Braunschweig 1974.

Description of localities.

Yugoslavia: Kotor. The shore of the Gulf of Kotor with limestone rocks. Xerophilous vegetation of *Lycopodiopsis helvetica* (L.) Link., *Ce-*

terach officinarum DC., *Polypodium vulgare* L., *Ephedra? distachya* L., *Cyclamen graecum* Lk., *Jasminum fruticans* L., *Pistacia lentiscus* L., *Buxus sempervirens* L., *Calamintha montana* Lam., *Asparagus acutifolius* L., etc. *Drosophilidae* were collected on the decaying fungi *Lentinus tigrinus* (Bull.) Fr. on solitary willow (*Salix* sp.), 10. X. 1984.

Roumania: Cetatea Ponorului. Bihor Mts., Transsylvania. Deciduous woodland (*Fagus silvatica* L., *Carpinus betulus* L.) on limestone bedrock. Collecting on the fruit-bodies of *Fomes fomentarius* (L. ex Fr.) Kickx, 5. VII. 1976.

Deva. Transsylvania, 400 m ab. s. 1. Wood edge with *Quercus* spp., *Pinus nigra* Arnold, *Carpinus betulus* L., cleared places with ruderal herbs — *Xanthium spinosum* L., *Anchusa procera* Bess., *Teucrium chamaedrys* L., etc., Beer traps exposed 14.—16. VII. 1976.

Groapa Barsa. Limestone part of Bihor Mts. Beech wood with rich undergrowth — *Ranunculus aconitifolius* L., *Soldanella* spp., *Pulmonaria* spp., *Lamium galeobdolon* Nath., *Aposeris foetida* (L.) Less., *Leucojum aestivum* L. Sweeping over herbs, 6. VII. 1976.

Gura Zlata. Retezat Mts., South Carpathians, 800 m ab. s. 1. Edge of beech wood with admixed old oaks. Undergrowth with abundant *Genistella sagittalis* (L.) Gams., along a brook with *Saxifraga rotundifolia* L., *Gladiolus imbricatus* L., etc. Collecting on *Fomes fomentarius* (L. ex Fr.) Kickx, and from beer traps, 11.—13. VII. 1976.

Navodari. Environs of the autocamp at the Black Sea coast, 3 km North of Mamaia. Brackish swamp, overgrown mainly by *Salicornia herbacea* L. and *Aster tripolium* L., drier patches with *Cakile maritima* Scop., *Cynodon dactylon* (L.) Pers., *Xeranthemum annuum* L. and some shrubs — *Eleagnus angustifolia* L., *Ailanthus peregrina* (Bucht.) Barkl. and *Tamarix* sp. Beer traps exposed 9.—16. VIII. 1975.

Obirsia Lotrului. Sebes Mts. in South Carpathians, 1000 m ab s. 1. Sweeping over growth of *Myricaria germanica* Desv. at a brook, 10. VII. 1976.

Turda. Periphery of the Turda Pass, 450 m ab. s. 1., Transsylvania. Woodland, composed predominantly of *Carpinus betulus* L., and thermophilous herbaceous vegetation — *Lactuca serriola* (L.) Torn., *Onopordon acanthium* L., *Silene otites* Wibel, etc., Collecting on tree sap and from beer traps, 7.—9. VII. 1976.

Bulgaria: Lozenec. Environs of a village on the coast of Black Sea, 9 km North of Mičurin. Deciduous woodland, mainly of *Quercus pubescens* Willd., *Q. cerris* L. and *Carpinus orientalis* Mill., on the edge with dense growth of *Paliurus spina-christi* Mill., *Clematis vitalba* L., *Smilax* sp., etc. Undergrowth scarcely developed, on deforested places occur *Chondrilla juncea* L., *Echinops ritro* L., *Anchusa procera* Bess., wet places with *Ruscus aculeatus* L., *Arum maculatum* L., etc. Beer traps exposed 10.—17. VIII. 1977; besides, *Drosophila trivittata* and *Mycodrosophila poecilogastra* were collected also from surface of a bracket fungus (*Phellinus* sp.).

Primorsko. Lowland forest along Karagač river, about 2 km from the coast of the Black Sea; dominant trees are *Acer campestre* L., *Carpinus orientalis* Mill., *Corylus* sp., *Alnus* sp. and creeper *Smilax excelsa* L. Some places with extensive growths of *Sambucus ebulus* L.; *Parietaria officinalis* L. and *Urtica pilulifera* L. are the most abundant undergrowth plants. Beer traps exposed 5.—12. VIII. 1978. *Drosophila trivittata* and *Mycodrosophila poecilogastra* were collected from the fungus *Pleurotus cornucopiae* Paul ex Pers.

USSR — Ciscaucasia: Soči. Deciduous grove with prevailing *Carpinus orientalis* Mill., near the windmill (Staraja Melnica), about 150 m ab. s. l. Tree trunks covered by mosses and lichens and with abundant creepers, mainly *Hedera helix* L. Many spring-flowering plants, e.g. *Cyclamen coum* Mill., *Primula vulgaris* Huds., *Dentaria glandulosa* W. K., *Lathyrus vernus* (L.) Bernh., *Lathraea squamaria* L., *Borago* sp., *Epimedium* sp., besides other herbs — *Sanicula europea* L., *Phyllitis scolopendrium* (L.) Newm., *Arum maculatum* L., etc. Beer traps exposed 2.—7. IV. 1982.

Description of the localities from Turkey was given by Götz (1967). As for the remaining localities, notes on ecological circumstances recorded on locality labels (if recorded) are quoted in the text under individual species of flies.

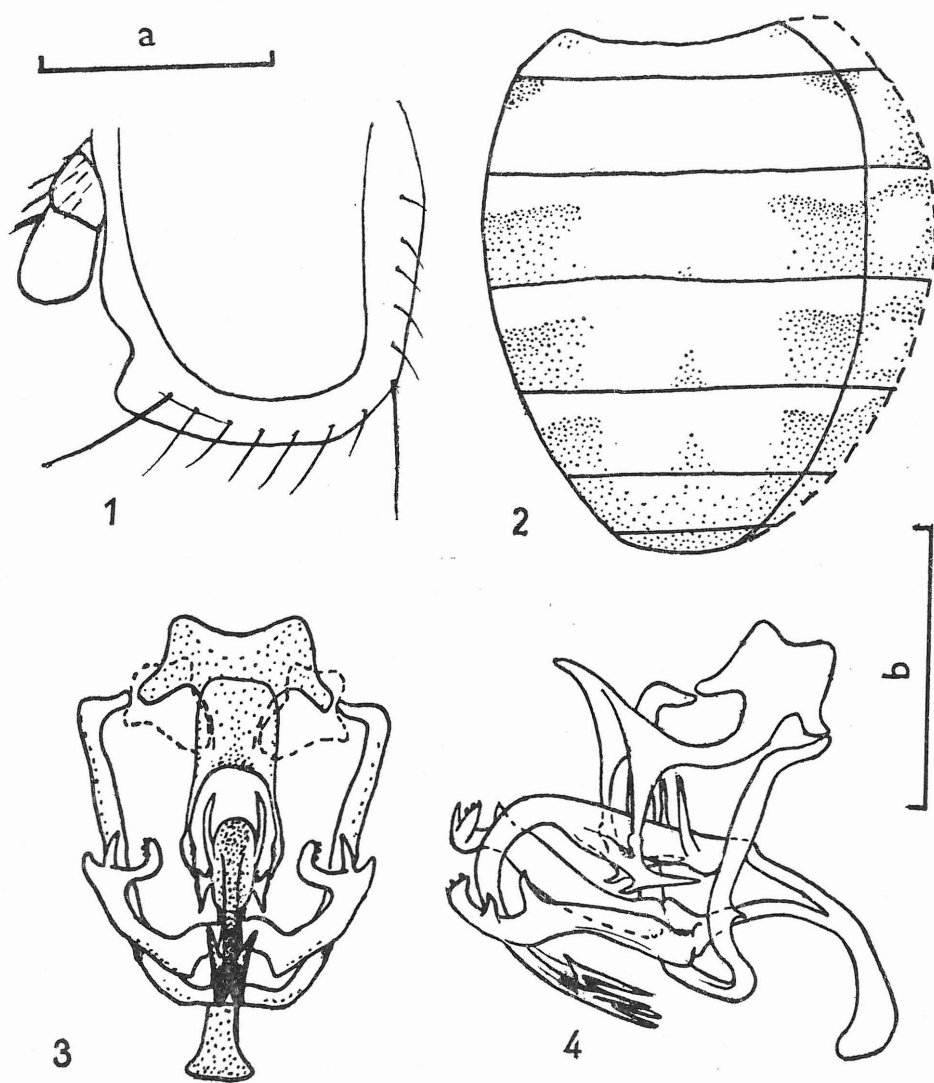
DROSOPHILIDAE

***Amiota (Phortica) goetzi* sp. n.**

Member of the *variegata* — complex (Máca, 1977, Okada, 1977) of *Amiota* Loew, 1862. The species is comparatively small and pale. Posteroventral corner of eye margin is rather clearcut (Fig. 1), dark pattern at the medial line of abdomen is reduced (Fig. 2). Phallic organs as in Figs. 3—4. In the following full description, mostly characters distinguishing this species from *A. (P.) variegata* Fallén (1823) are given.

♂: Facial keel rather sharply interrupted by transverse depression (variable character, partly dependent on the degree of sclerotization of the face). Middle of frons with about 16 microtrichiae. Dark area of frons restricted to the region of ocellar triangle. Posterior part of each periorbita with a dark spot. Length ratio of orbital bristles 2.3:1:2.3 (exceptionally, 3:1:3). In dried specimens, periorbits are slightly impressed in the region of orbital bristles. Occiput mostly brown in paramedial areas, a strip along whole hind margin of eye and a triangular patch between inner verticals (each side) are pale yellowish. Posteroventral corner of eye margin rather clearly developed (more rounded in other Palaearctic species of the complex, but almost the same in *A. erinacea* Máca, 1977; this character should be examined in strictly lateral aspect).

Mesonotum with apparent microsculpture, weakly pollinose. Ground colour of mesonotal disc brown. Colour pattern little contrasting, but the humerus and notopleural callus are conspicuously whitish yellow. Scu-



Figs. 1—4 *Amiota (Phortica) goetzi* sp. n. (Holotype ♂). 1: Lower part of head, lateral aspect. 2: Abdomen, dorsal aspect [lateral parts of tergites shown on the right side]. 3: Phallic organs, ventral aspect. 4: Dito, lateral aspect.
 Scales: a — 0.5 mm [Fig. 1], 0.2 mm [Figs. 3—4]; b — 1 mm [Fig. 2].

tellum yellowish, with indistinct pale brown spots. Scutellar index about 1.1. Wing length 2.7—3.0 mm. C-index 2.5, 4v-i 2.9—3.0, 4C-i 1.5, 5x-i 0.8—1.0. C_3 range about 0.7. Wing membrane along transverse veins

without conspicuously clustered microtrichiae. Colour pattern of legs slightly developed but distinct; trochanters and tarsi completely yellow. Length ratio of metatarsus to other tarsal segments altogether: 0.8; 1; 0.8 (fore, middle and hind tarsi, respectively).

Abdominal pattern well developed only in the lateral parts of tergites, medial line of both 4th and 5th tergite with diffuse triangular patch, this patch mostly absent on 3rd tergite; paramedial parts completely yellow. 6th sternite roughly pentagonal, desclerotized at base. Epandrium with strongly developed apodeme, heel nearly horizontal. Bristles of anal lamellae rather long [up to 0.15 mm] and somewhat wavy at apex. Phallic organs: Anterior parameres as in *A. variegata*. Dorsal mantle (caudal lobe of posterior paramere) nearly quadrangular. Medial rod of aedeagus basally with a pair of ventral processes, each of them with one ventral and one cranial projection; apex of medial rod slightly bifurcated. Lateral rods V-shaped, attached to the subapical part of medial rod. Apodeme of aedeagus triangularly dilated at apex.

♀: Similar to male in most characters. Abdominal pattern limited to dark lateral margins of tergites 2nd to 5th and triangular medial patches on tergites 4th to 5th; paramedial parts of tergites pale or with only slight traces of darker pattern. Perineal plates triangular, well differentiated; sclerotized pregenital lamellae undeveloped.

Holotype ♂: Turkey: Bursa, 28.—29. VII. 1962, W. Götz lgt. (ZMZ).

Paratypes: Turkey: Bursa, 28.—29. VII. 1962 — 7 ♂. Tarsus, 1. V. 1962 — 1 ♀. Samsun, 14.—16. VII. 1962 — 2 ♀. All W. Götz lgt. (ZMZ and Coll. Máca).

Amiota (Phortica) semivirgo Máca, 1977

Yugoslavia: 2 ♂, 1 ♀; Mostar (H. Burla lgt.), Šumarice, Popovica in Fruška Gora (both G. Bächli lgt.); IV., VI.—VII. *Turkey: 4 ♂, 12 ♀; Samsun, Trabzon (both W. Götz lgt.); VII. All ZMZ.

Amiota (Phortica) variegata (Fallén, 1823)

Yugoslavia: 2 ♂; Šumarice (G. Bächli lgt.); VI.; ZMZ. Bulgaria: 3 ♂; Bansko Nat. Park (A. Draskovits and A. Vály lgt.; NMB), Lozenec, Primorsko; VIII. *Turkey: 3 ♂, 6 ♀; Zonguldak (W. Götz lgt.); VII.; ZMZ.

Gitona distigma Meigen, 1830

USSR, Ukraine: 6 ex.; Podolia region (Manus lgt.); without date; NMP.

Leucophenga maculata (Dufour, 1839)

Yugoslavia: 1 ♀; Kotor; X. USSR, Ciscaucasia: 1 ♂, 1 ♀; Soči; IV.

Leucophenga quinquemaculata Strobl, 1893

* Roumania: 1 ♀; Gura Zlata; VII.

Stegana furta (Linné, 1767)

Roumania: 1 ♂; Navodari; VIII.; specimen lost.

Drosophila (Dorsilopha) busckii Coquillett, 1901

Yugoslavia: 1 ♂; Kotor; X.

Drosophila [s. str.] *histrion* Meigen, 1830

Roumania: 3 ♀; Gura Zlata, Turda, Navodari; VII.—VIII.

Drosophila (s. str.) *immigrans* Sturtevant, 1921

Yugoslavia: 5 ♂, 1 ♀; Radovici nr. Kotor (P. Lauterer lgt.; MMB), Kotor; X. *Roumania: 1 ♂, 3 ♀; Turda; VII.

Drosophila (s. str.) *kuntzei* Duda, 1924

Roumania: 11 ♂, 7 ♀; Deva, Turda, Gura Zlata; VII.

Drosophila (s. str.) *phalerata* Meigen, 1830

Yugoslavia: 1 ♂; Kotor; X. Roumania: 23 ♂, 6 ♀; Gura Zlata, Turda, Navodari; VII.—VIII. Bulgaria: 3 ♂, 4 ♀; Sozopol (A. Draskovits and A. Vály lgt.; (NMB), Primorsko, Lozenec; VIII.

Drosophila (s. str.) *testacea* Roser, 1840

Roumania: 22 ♂, 7 ♀; Gura Zlata, Turda, Navodari; VII.—VIII. *Bulgaria: 1 ♂; Bansko Nat. Park (A. Draskovits and A. Vály lgt.); VIII.; NMB.

Drosophila (s. str.) *transversa* Fallén, 1823

Roumania: 1 ♀; Navodari; VIII. *Bulgaria: 1 ♀; Begovica basin — Pirin Mts. (P. Lauterer lgt.); VII.; MMB. USSR, Ukraine: 13 ♂, 17 ♀; Podolia region (Manus lgt., NMP), Kanev Nat. Reserve (reared from *Russula* sp. and *Phallus impudicus* collected VIII., M. Delikatnyj lgt.; ZMM); VIII.—IX.

Drosophila (s. str.) *unimaculata* Strobl, 1893

Roumania: 1 ♀; Turda; VII.

Drosophila (*Hirtodrosophila*) *cameraria* Haliday, 1833

*Bulgaria: 1 ♀; Bansko Nat. Park (A. Draskovits and A. Vály lgt.); VIII.; NMB.

Drosophila (*Hirtodrosophila*) *confusa* Staeger, 1844

Roumania; 34 ♂, 29 ♀; Deva, Gura Zlata, Cetatea Ponorului, Turda; VII.

Drosophila (*Hirtodrosophila*) *trivittata* Strobl, 1893

*Bulgaria: 8 ♂, 10 ♀; Primorsko, Lozenec; VIII.

Drosophila (*Lordiphosa*) *fenestrarum* Fallén, 1823

*Bulgaria: 1 ♀; Albena nr. Varna (V. Martinek lgt.); IX.; Coll. V. Martinek.

Drosophila (*Scaptodrosophila*) *deflexa* Duda, 1924

*Roumania: 2 ♂; Turda, Navodari; VII.—VIII. *Bulgaria: 1 ♂, 2 ♀; Primorsko, Lozenec; VIII.

Drosophila (*Scaptodrosophila*) *rufifrons* Loew, 1873

Roumania: 3 ♂; Turda; VII.

Drosophila (*Sophophora*) *ambigua* Pomini, 1940

*Roumania: 1 ♂; Turda; VII.

Drosophila (*Sophophora*) *melanogaster* Meigen, 1830

Yugoslavia: 1 ♀; Kotor; X. Roumania: 2 ♂, 2 ♀; Navodari; VIII. Bulgaria: 1 ♀; Melnik (A. Draskovits and A. Vály lgt.); VIII.; NMB.

Drosophila (*Sophophora*) *obscura* Fallén, 1823

Roumania: 56 ♂, 24 ♀; Deva, Gura Zlata; Turda; VII. *Bulgaria: 1 ♀; Lozenec; VIII.

Drosophila (Sophophora) simulans Sturtevant, 1921

Yugoslavia: 18 ♂, 74 ♀; Radovici nr. Kotor (P. Lauterer lgt.); X.; MMB.
 *Roumania: 1 ♂; Navodari; VIII.

Drosophila (Sophophora) subobscura Collin, 1936

Yugoslavia: 4 ♂, 83 ♀; Radovici nr. Kotor (P. Lauterer lgt.); X.; MMB.
 *Roumania: 1 ♂, 1 ♀; Turda, Navodari; VII.—VIII. * Bulgaria: 2 ♂, 4 ♀; Lozen nr. Sofia, Melnik, Sozopol (all A. Draskovits and A. Vály lgt., NMB), Primorsko, Lozenec; VIII. USSR, Ciscaucasia: 5 ♂, 11 ♀; Soči; IV.

Drosophila (Sophophora) subsilvestris Hardy & Kaneshiro, 1968

*Roumania: 1 ♂; Turda; VII. USSR, *Ukraine: 1 ♀; Podolia region (Manus lgt.); without date; NMP.

Drosophila (Sophophora) tristis Fallén, 1823

Roumania: 1 ♂; Turda; VII.

Mycodrosophila poecilogastra (Loew, 1874)

*Bulgaria: 4 ♂, 2 ♀; Primorsko, Lozenec; VIII. USSR, Ciscaucasia: 4 ♂, 3 ♀; Soči; IV.

Scaptomyza (Parascaptomyza) pallida (Zetterstedt, 1847)

Yugoslavia: 1 ♂; Sirig in Vojvodina (P. Lauterer lgt.); VI.; MMB. *Albania: 1 ♂, 2 ♀; Mali Dajti — 1400 m (J. Moucha lgt.); V.; NMP. Roumania: 2 ♂, 2 ♀; Groapa Barsa, Obirsia Lotrului, Navodari; VII.—VIII. Bulgaria: 23 ♂, 23 ♀; Plovdiv, Rila, Kjustendil, Šipka (all Martinovits lgt.; NMB), Vitoša — at 1000 and 1800 m, Lozen near Sofia, Bansko Nat. Park, Melnik, Sozopol (all A. Draskovits and A. Vály lgt.; NMB), Kovač — Rila Mts. (P. Lauterer lgt.; MMB), Albena nr. Varna (M. Barták lgt. et coll.), Primorsko, Lozenec; VI.—VIII. USSR, Ukraine: 1 ♂; Naučnoje — Crimea (M. Barták lgt.); VII.; coll. Barták. USSR, Ciscaucasia: 4 ♂, 8 ♂; Soči, IV.

Note: Of the five specimens from Bulgaria: Bansko National Park, four were found to be attacked by ectoparasitic fungus *Stigmatomyces scaptomyzae* Thaxter of the family Laboulbeniaceae. From one to about thirty specimens of fungus were found on one fly.

Scaptomyza (s. str.) *flava* (Fallén, 1823)

Bulgaria: 3 ♂; Vitoša — at 1000 m (A. Draskovits and A. Vály lgt.; NMB), Albena nr. Varna (M. Barták lgt. et coll.); VII.—VIII.

Scaptomyza (s. str.) *graminum* (Fallén, 1823)

Yugoslavia: 1 ♂; Prevalac in Serbia (P. Lauterer lgt.); VI.; NMB. Roumania: 1 ♀; Gura Zlata; VII. Bulgaria: 27 ♂, 11 ♀; Vitoša — at 1000 and 1800 m (A. Draskovits and A. Vály lgt.; NMB), Rila Mts. — at 1400 m (Martinovits lgt.; NMB), Rila Mts. — Treštenik, Rila Mts. — Kovač, Pirin Mts. — Banderica valley (all P. Lauterer lgt., MMB); VI.—VIII.

ODINIIDAE

Odinia boletina (Zetterstedt, 1848)

*Bulgaria: 1 ♀; Primorsko; VIII.

PERISCCELIDIDAE

Periscelis annulata (Fallén, 1813)

*Bulgaria: 1 ♀; Primorsko; VIII.

Discussion

Although the paper brings a number of new records to individual countries and one species new to science, the fauna of Drosophilidae of Southeastern Europe and Turkey remains very poorly known. The localities mentioned in the present paper are widely scattered and some of the collections were made only by inadequate or too specialized methods (sweeping, rearing from fungi or collecting from fruit-bodies of fungi). More appropriate methods — collecting on fruit or beer bait — were also used, but they could be applied only for a short time in each of localities. Besides, most of collecting work was done during the dry and warm summer season, which is obviously unfavourable for Drosophilidae. So it may be stated that only a small part of the actual fauna of Drosophilidae was recorded even in the studied localities. As for Odiniidae and Periscelididae, records of the families are scarce throughout; presented records are the first mentions of these families from Bulgaria — compare Beschovski (1976).

The inspected localities may be principally divided into two categories. In the highlands there was collected a relatively high rate of forest species, some of them being stenoeccious and rare (*Leucophenga quinquemaculata*, *Drosophila unimaculata* etc.). This holds especially for the Roumanian highland localities where beer traps were used for collecting. On the other hand, mostly common ubiquitous species were found in the localities situated on the Black Sea coast; there these species seem to be less dependent upon synanthropic circumstances than they are in the more northern countries. The results of collecting in Turkey are too sparse but they may indicate that more of rare or even new species should be collected if the collecting work were carried out here during a more favourable season; April to June, and probably the winter months, would perhaps be more profitable.

The sex ratio {males/females number ratio} is conspicuously low in *Drosophila simulans* and *D. subobscura* from Yugoslavia: Radovici, collection of October. Phenologic investigation would be necessary to explain this phenomenon.

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Supplement to the fauna of Drosophilidae of Greece

Recently some localities of Drosophilidae from Greece have been supplemented, which are mostly based on specimens from the Zoological Institution, Lund (ZIL; the specimens borrowed through the kindness of Dr. R. Danielsson).

Drosophila (*Lordiphosa*) *andalusiaca* Strobl, 1906

Greece: 2 ♂♂, 2 ♀♀; Viotia, Kavala nr. Kipia, Fthiotis nr. Iti, Mt. Olympos — Pieria (all Danielsson lgt.); VI; ZIL.

Drosophila (*Scaptodrosophila*) *rufifrons* Loew, 1873

Greece: 1 ♂; Korfu (Kerkyra; A. Hetschko lgt.); V; NMP.

Scaptomyza (s. str.) *graminum* (Fallén, 1823)

Greece: 5 ♂♂, 5 ♀♀; Viotia, Evritania (Mt. Timfristos), Kavala nr. Kipia, Fthiotis nr. Iti (all Danielsson lgt.); VI; ZIL.

Summary

Amiota (*Phortica*) *goetzi* sp. n. is described from Turkey and altogether 21 new records of Drosophilidae species are given from individual countries (Albania, Roumania, Bulgaria, Greece, European USSR, Turkey); some localities in Yugoslavia were also investigated. The new records from some countries encompass the species mentioned from there (without concrete locality) as "unpublished" by Bächli and Rocha Pité (1982). Periscelididae and Odiniidae (one species each) are recorded for the first time from Bulgaria.

The localities investigated by author are characterized briefly as for the main components of their vegetation. The highland localities (especially in Roumania) were found to harbour some stenoecious forest species of Drosophilidae; the coastal localities (including those little affected by man) showed high proportion of synanthropic species of this family. Convenience of the collecting methods used and of the collecting season are critically appreciated. *Stigmatomyces scaptomyzae* Thaxter, a parasite fungus of *Scaptomyza pallida* Zett., is given from Roumania. A case of aberrant sex ratio of *Drosophila simulans* Sturt. and *D. subobscura* Collin is recorded.

References

- Bächli G., Kekić V., 1983a: Studies of Drosophilidae (Diptera) in Yugoslavia. II. Collections from Goč, Jastrebac and Priština. In: Drugi simpozijum o fauni SR Srbije, p. 107—110. Beograd.
- Bächli G., Kekić V., 1983b: Studies of Drosophilidae (Diptera) in Yugoslavia. IV. Collections from Ohrid, Kupari and Poreč. *Biosistematika* (Beograd), 9 (2): 109—118.
- Bächli G., Rocha Pité M. T., 1982: Annotated bibliography of Palaearctic species of Drosophilidae (Diptera). *Beitr. Ent.*, 32: 303—392.

- Bächli G., Rocha Pité M. T., 1984: Family Drosophilidae. In Sós Á. [ed.]: Catalogue of Palaearctic Diptera, 10, p. 186—220. Akadémiai Kiadó, Budapest.
- Beschovski V. L., 1972: Representatives of Diptera-Brachycera in the caves of Bulgaria. [In Bulgarian; Russian and English summary]. *Acad. Bulg. Sci. — Bull. Inst. Zool. Mus.*, **35**: 23—29.
- Beschovski V. L., 1975: The Black Sea coast inundated by waves and its dipterous fauna (Diptera — Brachycera). [In Bulgarian; Russian and English summary]. *Bulg. Acad. Sci. — Hydrobiol.*, **2**: 3—18.
- Beschovski V. L., 1976: Acartophthalmidae, Anthomyzidae, Aulaeigastridae, Camillidae and Diastatidae — new Diptera Brachycera for the Bulgarian fauna, *Acta zool. bulg.*, **5**: 93—96.
- Götz W., 1967: Untersuchungen über den chromosomalen Strukturpolymorphismus in kleinasiatischen und persischen Populationen von *Drosophila subobscura* Coll. *Molec. gen. Genetics*, **100**: 1—38.
- Kekić V., Bächli G., 1981: Studies of Drosophilidae (Diptera) in Yugoslavia. I. Collection from Biograd Lake. *Glas. republ. zavoda zašt. prirode*, Titograd, **14**: 85—88.
- Kekić V., Bächli G., 1983: Studies of Drosophilidae (Diptera) in Yugoslavia. III. Collections from Popovica. In: Drugi simpozijum o fauni SR Srbije, p. 111—114. Beograd.
- Kozarov P., 1908: Trudove na d'ržavnata zemedelska opitna stancija „Obrascov čiflik“ pri Ruse, I (2). 264 pp. Ruse. [In Bulgarian].
- Máca J., 1977: Revision of Palaearctic species of *Amiota* subg. *Phortica* (Diptera, Drosophilidae). *Acta ent. bohemoslov.*, **74**: 115—130.
- Nedelkov N., 1912: Šesti prinos k'm entomologičnata fauna na B'lgaria. *Spis. B'lg. akad. nauk.* **2**: 177—218. [In Bulgarian].
- Okada T., 1977: The subgenus *Phortica* Schiner of the genus *Amiota* Loew of Japan and the Oriental Region, with reference to anti-Burla's rule (Diptera, Drosophilidae). *Bull. Biogeogr. Soc. Japan*, **32**: 17—31.
- Pelov V., Trenchev G., 1973: Krušovata belokrilka i nejnite entomofagi. *Siphoninus phillyreae* Hal. and its entomophages. *Rastit. Zaštita* (Sofia), **21** (11): 26—27.