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LAUXANIIDAE (DIPTERA), NEW PALAEARCTIC SPECIES AND TAXONOMICAL NOTES*

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Distribution data for 23 lauxaniid species are given incl. new records for Czechoslovakia, Roumania, Hungary, Bulgaria, the USSR, North Korea and Japan. Seven new species and a new subgenus of *Lyciella* are described [*Homoneura koreana* sp. n., *H. lushanica* sp. n., *H. shatalkini* sp. n., *H. stackelbergiana* sp. n., *H. stigmata* sp. n., *L.* (*Shatalkinia* subg. n.) (type-species: *L.* (*S.*) *supraorientalis* sp. n.) and *Calliopum ceianui* sp. n.]; taxonomical status of other two species is clarified [*Lyciella vittata* (WALKER), *Sapromyza sordida* HALIDAY]. The problems of the delimitation of the Palaearctic region from the Oriental are discussed. With 30 figures.

The preparatory works and publication of the new Catalogue of Palaearctic Diptera have facilitated dipterology in Europe in various ways; complete or partial revisions in several families, collecting and critical review of the faunistic records, etc. have been made. In the family Lauxaniidae a complete revision was not possible (PAPP, 1981) but an extensive identification work and a study of types was made on materials of some European collections. The results of this work was partly involved in the manuscript of the lauxaniid part of the catalogue (PAPP, 1984), other parts are published here. Several new species were found, seven new species are described below, mainly from the easternmost parts of the Palaearctic region (in a conservative sense). Study of the lauxaniid fauna of North Korea (partly published here) and that of the Japanese fauna (first part has been published by SASAKAWA and IKEUCHI, 1982), revealed that the traditional "general biogeographical" borders cannot be upheld. The Amur and Ussuri region of the Soviet Far East and the adjacent areas have an endemic fauna coloured by some Palaearctic (Holarctic) species and some Oriental elements. The northern borders of the Oriental region for lauxaniids are as north as North Korea and Japan, i.e. similarly to numerous other groups it was found that no general delimitation is possible even for the major biogeographical regions: every animal group has its own story of evolution which is expressed more or less also in the present distribution of the species, species-groups, etc.

It is my agreeable duty to express my most sincere thanks to the following scientists and institutions for generous loans of type-materials and un-

* Zoological collectings by the Hungarian Natural History Museum in Korea (No. 70)

(Fig. 19) bilobate, blunt in lateral view (Fig. 20). Male cerci short with moderately long bristles.

Holotype male: North Korea: Prov. Kengi, Bagyon san, 8. VI. 1970 — Hung. Zool. Exp. I. in Korea, No. 112 — leg. DR. S. MAHUNKA et DR. H. STEINMANN. The male abdomen with genitalia is preserved in a plastic microvial with glycerine.

Homoneura stigmata sp. n. has no close relative among the Palaearctic species of *Homoneura*, it is obviously related to some Oriental species of the subgenus *Homoneura* s. str. with dark spotted wings (see e.g. KERTÉSZ, 1915); the peculiarities in its male genitalia (short and wide surstyli, bilobed apical part of phallus, shape of 7th synsclerite) serve as a safe base in its identification.

Shatalkinia subg. n. of *Lyciella* COLLIN, 1948

This new subgenus keys out to *Lyciella* COLLIN in STUCKENBERG's key (1971) for the Old World genera of lauxaniids: small black spines on costa not attaining apex of r_{4+5}, wings not rounded, face not prominently convex and not glossy, orbital bristles normal and reclinate (Fig. 22), third antennal joint not elongate, antennae of rather usual shape, arista with fine short rays dorsally and ventrally, hind tibia with a single ventroapical spur, wing venation as usual (as in many sapromyziform genera), posthumeral/presutural bristle present, no intraalar bristles, 1 + 3 *dc* pairs, anterior part of frons not protruding, 2 pairs of sternopleurals, frontofacial angle about 120°, no anteroventral bristle on hind femora, abdominal marginal bristles long but not erect, neither r_{2+3} or r_{4+5} setose, middle tibia with a single ventroapical spur, male hind leg not modified, no comb of small spines on the distal anteroventral surface of fore femora.

Contrarily to *Lyciella* s. str. species, prosternum not setose, 4—5 pairs of short presutural *acmi*, 1 + 2 pairs of long acrostichals and one additional pair of prescutellar bristles; genitalia unique: comparatively very small (male epandrium + cerci dorsally not longer than 0.2 mm), male cerci rather large and setose (Fig. 23), surstyli (telomeres) very small with a blunt medial apex; surstyli in subcaudal position (Fig. 24). Hypandrium with a pair of large and setose lateral processes, medial part not V-shaped but alike a plate; phallus very short and blunt; aedeagal complex with a pair of curved, caudally directed processes, which are regarded here as modified postgonites. Female sterna quadrangular, cerci with fine hairs. Type-species: *Lyciella* (*Shatalkinia*) *supraorientalis* sp. n.

Lyciella (*Shatalkinia*) supraorientalis sp. n.

Measurements in mm: body length 3.95 (holotype), 3.86—4.09 (paratypes); wings 4.55 × 1.83 (holotype), 4.55 × 1.80, 4.60 × 1.86 (paratypes); length of 3rd antennal joint 0.30, of 2nd joint 0.12 mm.

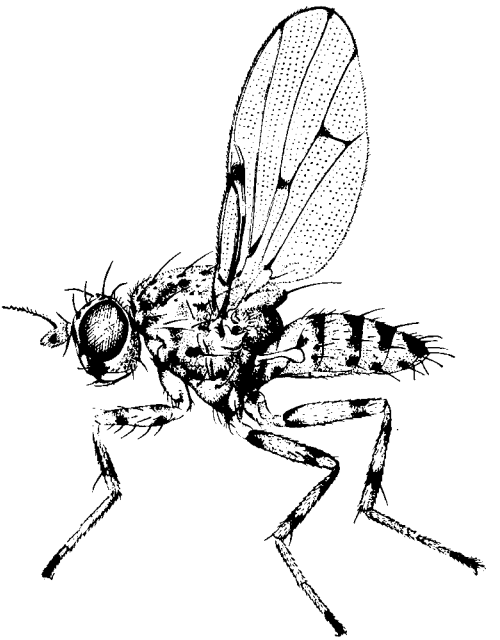


Fig. 22. *Lyciella* (*Shatalkinia*) *supraorientalis* sp. n., paratype male

Basic colour of body light greyish brown but characteristic frontal and thoracic bristles emerge from dark brown spots (Fig. 22), mesonotum with greasy shine, scutellum dorsally greyish, apically with 2 black (dark brown) spots separated by a narrow yellowish stripe, frons and face variegate, sagittal line and margins of eyes yellowish, palpi dark brown, legs greyish brown with a preapical and subbasal dark ring each on tibiae and with dark brown hue at least on ventral surface of femora preapically and basally (probably all these latter are diffuse dark rings), thorax with diffuse brown spots, abdominal terga 3—5 with a pair of dorsal more or less triangular dark brown spots each, more lateral marginal bristles emerge from small brown spots or these latter spots ± confluent.

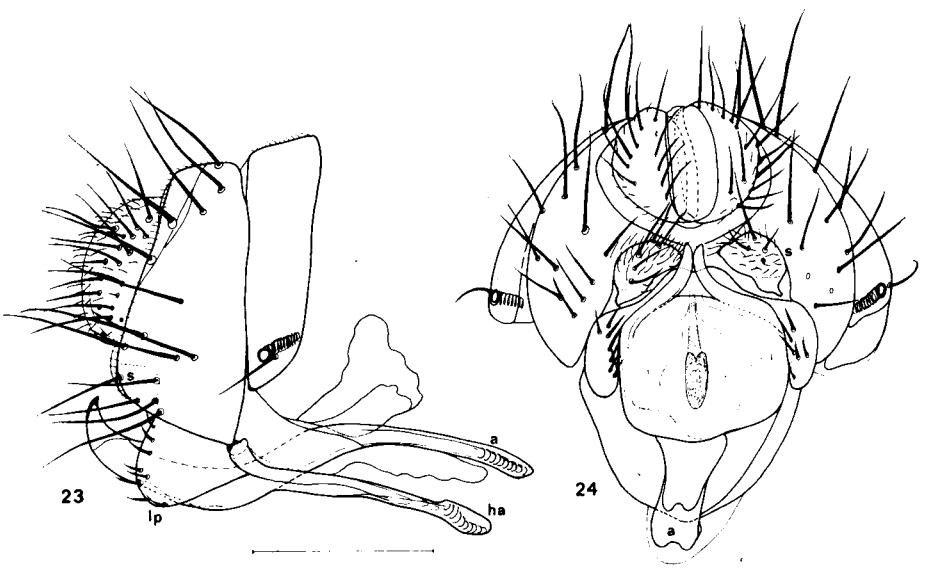
Arista with numerous dorsal and ventral rays: dorsals up to 0.09—0.10 mm, ventrals to 0.07 mm; hairs on 3rd antennal joint 0.035 mm long. Clypeus U-shaped ± protruding, palpi with some moderately long bristles, postero-ventral part of genae with 3 long bristles on both sides. Postvertical bristles cruciate, *oc* slightly longer than *ors*, 2 pairs of reclinate *ors*, *vte*, *vti* strong, postoculars in more than one row. Second antennal joint dorsally with a thin but rather long bristle, ventrally with several thin and moderately long bristles. Thoracic chaetotaxy: 1 *h*, 2 *np*, 1 *prst*, 1 + 3 *dc*, 1 *prsc*, 1 *sa*, 2 *pa*, 0 *ia*, 2 *sc*, 1 *mp*, 2 *st* pairs. Acrostichals only in 2 rows, 4—5 pairs of short presutural *acmi*, 1 + 2 pairs of enlarged acrostichals and the additional *prsc*

pair. Mesopleuron with thin but long (up to 0.13 mm) bristles, similar small bristles on caudal part of sternopleuron; 1 thin supracoxal propleural pair. All tibiae with long dorsal preapicals, middle tibia with a single, long ventroapical spur, hind tibia with a short (0.13 mm) ventral spur. Fore femora with 4—5 pairs of long posteroventral bristles. Wings (Fig. 22) light brownish, veins ochreous to light brown, except for areas of spots, dark hind crossvein, humeral vein, basal crossvein and basal parts of subcostal vein and of the r_s. Costa with a long basal bristle, black spots on costa with merger of *sc*, on r_1 and r_s, on anterior crossvein, on upper distal edge of discal cell and small spots at apices of r_{2+3}, r_{4+5} and median vein. Costal section 3 0.745 mm, section 4 0.48 mm, terminal section of *m* 1.57 mm, intracrossvein section 0.80 mm, ratio 1.965.

Male genitalia symmetrical and rather peculiar (see above, Figs 23, 24). Pregenital tergum with a pair of stigmatical bristles.

Holotype male: USSR: Юж. Приморье, Кедр. падь, 21. IX. 1980, leg. A. A. Шаталкин. Paratypes: 5 ♂, 1 ♀: data same as for the holotype. The holotype and four paratypes are deposited in the collection of the Zoological Museum of the Moscow State University, two paratypes in the collection of the Zoological Department of the Hungarian Natural History Museum, Budapest.

I dedicate this new subgenus to Professor Dr. A. A. Shatalkin (Zoological Museum, Moscow State University), who has supported my research in acalyptrates by sending invaluable dipterous materials collected in the Soviet Far East.



Figs 23—24. *Lyciella* (*Shatalkinia*) *supraorientalis* sp. n. paratype male, genitalia. 23 = genitalia with tergum 7 in lateral view, 24 = genitalia in a subventral view (*a*: phallapodeme, *ha*: hypandrium, *lp*: lateral process of hypandrium, *s*: surstylus). Scale: 0.2 mm