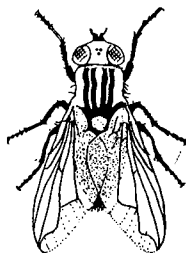


# Two new palaeartic Syrphidae (Diptera)

F. CHRISTIAN THOMPSON and ERNST TORP

Ent. scand.



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Two common misidentifications are corrected: *Brachyopa testecea* of Stackelberg is a complex of two species, *testecea* Fallén and *B. obscura*, n.sp. (U.S.S.R., Leningrad Obl., Yashchera); and *Orthonevra intermedia* of Stackelberg is *O. stackelbergi* n.sp. (U.S.S.R., Leningrad Obl., Yashchera). A lectotype is designated for *Orthonevra intermedia* (Lundbeck), and *rossica* Stackelberg is synonymized with that species.

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While preparing our forthcoming Guide and Catalog of Palaeartic Syrphidae (Thompson & Torp, in preparation), a few mis-identifications were discovered. These mis-identifications are here resolved.

Abbreviations used in the lists of material are:

- CNC = Canadian National Collection, Ottawa, Canada.  
USNM = Smithsonian Institute, U.S. National Museum of Natural History, Washington, U.S.A.  
ZIAS = Zoological Institute, Academy of Sciences, Leningrad, U.S.S.R.

***Brachyopa obscura*** Thompson & Torp, n. sp.  
Figs. 1-5.

*Brachyopa testecea* (in part) of: Stackelberg 1970: 39;  
Thompson 1980: 212.

*Type locality*: U.S.S.R.: Yashchera.

*Type-material*: *Holotype*, male, U.S.S.R., Leningradskaya Oblast, Luzhskiy Rayon, Yashchera; 21 June 1958, leg. A. A. Stackelberg, deposited in Zool. Inst. Acad. Sci. Leningrad. — *Paratypes*: 8 ♂ from same locality as holotype but with the following dates: 15 July 1957 (ZIAS), 24 June 1958 (CNC), 3 July 1959 (USNM), 15 June 1960 (ETC, USNM), 18 June 1960 (ETC), 27 June 1962 (ZIAS), 2 June 1968 (ZIAS); Northwest USSR, vicinity of Luga, Leningradskaya Oblast, 20 June 1937, leg. Tolmatoschevo (2 ♂, CNC), 3 July 1938, leg. Tolmatoschevo & Stackelberg s (2 ♂, ZIAS); Leningradskaya Oblast, Tobshuya, 8 May 1934, leg. Stackelberg (3 ♂, CNC, ZIAS); Leningradskaya Oblast, Kartashevka, 28 May 1928, leg. Stackelberg (1 ♂, ZIAS); unknown locality (1 ♂, ZIAS).

*Diagnosis*: Indistinguishable from *testecea* Fallén except for the structure of the male genitalia. If they

are extended on freshly collected material, the smooth (*obscura*) versus the carinate (*testecea*) ventral surface of the 9th sternum can usually be seen without further preparation.

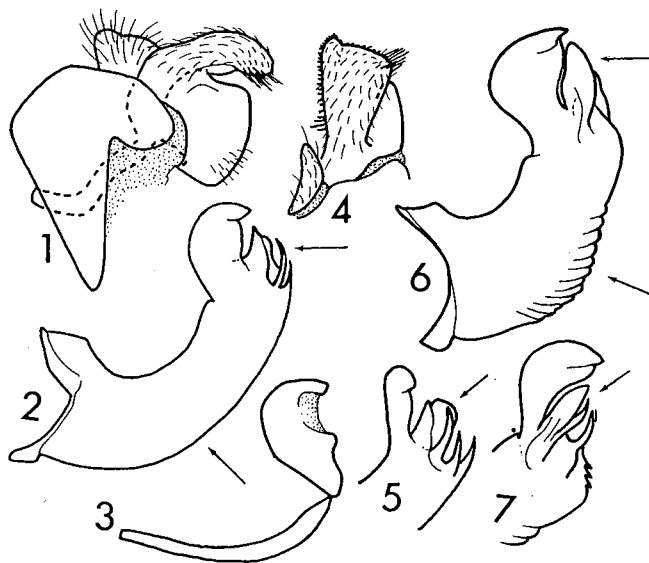
*Etymology*: *obscura* because so little is known about its natural history.

## Description

*Male genitalia*: Surstyle (Figs. 1, 4) with a strong apicolateral tuft of bristles (with only fine hairs apicolaterally in *testecea* Fallén); 9th sternum (Fig. 2) narrower, more elongate, smooth (not broad, short, and carinate ventrally (Fig. 6)); superior lobe (Fig. 2) with ventral lobe narrower, medially produced and not obscuring lingular arm (not broad and not produced medially (Fig. 6)); lateral lingular arm (Fig. 2) visible laterally (not hidden from lateral view by ventral lobe of superior lobe (Fig. 6)); medial lingular arms (Fig. 5) separated and without anteroventral carina (not confluent, with left medial lingular arm prolonged into dentate anteroventral carina (Fig. 7)).

## Remarks

The true status of this species was obscured by the confusion surrounding the name "*conica* Panzer". Torp had both species (*obscura* and *testecea*) as distinct in his collection, but as "*testecea*" and "*conica*" respectively. When Thompson (1980) resolved the problem of the identity of "*conica*" of Panzer and other au-



Figs. 1-7. *Brachyopa*, male genitalia. — 1-5. *obscura* n. sp. — 6-7. *testecea* (Fallén). — 1. 9th tergum and associated structures, lateral view. — 2, 6. 9th sternum and associated structures, lateral view. — 3. Aedeagus and aedeagal apodeme, lateral view. — 4. Surstyle and cercus, dorsal view. — 5, 7. Apex of 9th sternum with associated structures, posteroventral view.

thors, it became clear that *testecea* of Stackelberg and probably other authors was a complex of two cryptic species.

Both species are sympatric and synchronous at the type-locality of *obscura*. Unfortunately, little else is known about the natural history of *obscura*.

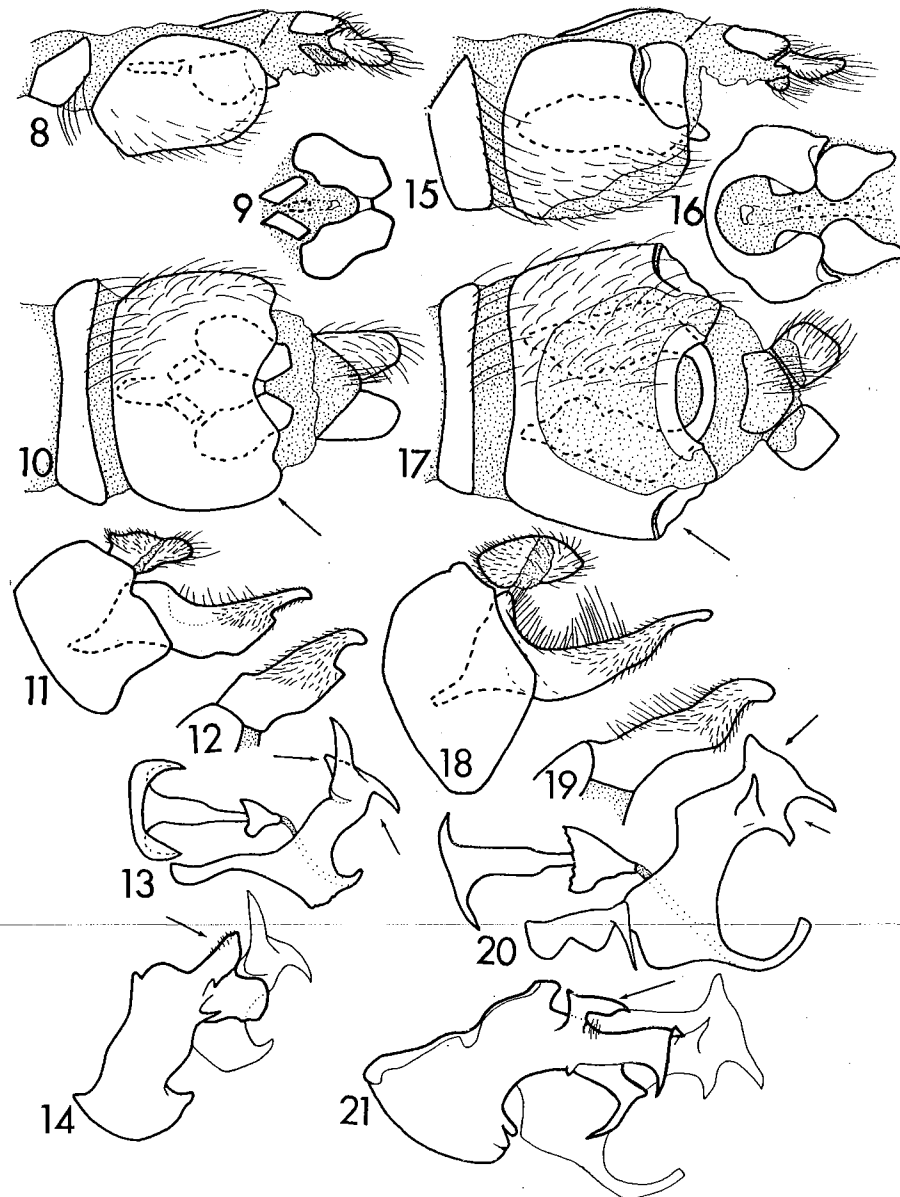
***Orthonevra stackelbergi* Thompson & Torp n. sp.**  
Figs. 15-21.

*Orthonevra* (sic) *intermedia* of Stackelberg, 1953: 347, 1970: 55; Violovitsh 1979: 53.

*Type locality*: U.S.S.R.: Yashchera.

*Type material*: *Holotype*, male, U.S.S.R., Leningradskaya Oblast, Luzhskiy Rayon, Yashchera, 16 June 1959, leg. A. A. Stackelberg deposited in Zool. Inst. Acad. Sci., Leningrad — *Paratypes*: Allotype female: same locality as holotype, 26 July 1958; also in ZIAS. 55 ♂♂, 22 ♀♀ from same locality as holotype but collected on following dates: 1 July 1957, 2 July 1958, 26 July 1958, 16 June 1959 (2 ♂, USNM), 25 June 1959, 9 July 1959 (1 ♂ CNC), 27 June 1960, 28 June 1960, 1 July 1960, 5 July 1960, 19 June 1961, 22 June 1961, 23 June 1961, 27 June 1961, 28 June 1961, 11 June 1962, 25 June 1962, 28 June 1962, 4 July 1962, 7 July 1962, 3 June 1963, 4 June 1963, 7 June 1963, 8 June 1963, 10 June 1963, 11 June 1963, 16 June 1963, 19 June 1963, 21 June 1963, 25 June 1963, 26 June 1963, 9 July 1963, 13 July 1963, 19 June 1964, 24 June 1965, 25 June 1965, 30 June 1965, 2 July 1965, 4 July 1965, 11 July 1965, and 1 July 1968. U.S.S.R., Ussur Kray, Maykhe bl., Shkotov, 3 June 1927, 4 June 1927 (Stackelberg) 1 ♂ 2 ♀; Ostrov Sakhalin, Cape Smirnykh, 19 July 1952, on *Spirea* (N. Violovitsh) (1 ♂); Ussur Kray, Tigrovoy, near Suchan (=Partisansk), 11 June 1927 (Stackelberg) (1 ♂);

Yakutsk, estuary of river Vilyuy, 8-16 June 1875 (Chekanovsky) (1 ♂); Primorskiy Kray, s. Troitskoye, Lake Khanka, 3 July 1909, (Chersky) (1 ♂); Khabarousk Kray, Khabarousk, 23 July 1916 (Pavlenko) (1 ♂); Leningradskaya Oblast, Luga, 7 July 1938 (Tolmatshchevo & Stackelberg) (1 ♂ 1 ♀), 13 July 1952 (Stackelberg) (1 ♂), 1 July 1953 (Stackelberg) (1 ♂), 7 July 1953 (Stackelberg) (1 ♀), 10 July 1953 (Stackelberg) (2 ♂), 15 July 1953 (Stackelberg) (2 ♂ 3 ♀, USNM & ZIAS), 22 July 1953 (Stackelberg) (1 ♂ 1 ♀), 28 June 1954 (Stackelberg) (1 ♀ CNC), 5 July 1954 (Stackelberg) (10 ♂), 21 July 1954 (Stackelberg) (2 ♂ ZIAS, 1 ♂ ETC), 24 July 1954 (Stackelberg) (4 ♂), 16 July 1955 (Stackelberg) (1 ♂), 19 July 1955 (Stackelberg) (2 ♀), 27 July 1955 (Stackelberg) (1 ♀), 1 August 1955 (Stackelberg) (3 ♂ 1 ♀ USNM), 5 August 1955 (Stackelberg) (1 ♂), 10 August 1955 (Stackelberg) (1 ♀ USNM); Amurskaya Oblast, Klimoutsky, 40 km West of Svobodnoy, 11 June 1957 (Zinovyev) (1 ♂ 2 ♀), 30 June 1958 (Zinovyev) (1 ♂), 19 June 1958 (Zinovyey) (1 ♂), 9 July 1958 (Zinovyey & Borisova) (1 ♂), 14 July 1958 (Zinovyey & Borisova) (1 ♂), 15 July 1958 (Zinovyey & Shubina) (1 ♀), 27 July 1958 (Zinovyey & Borisova) (1 ♂ 1 ♀), 22 June 1959 (Zinovyey) (1 ♀); Amurskaya Oblast, Okz. Tolbuzino, Upper reaches of Amur River, 1-19 July 1929 (Prinada) (1 ♂); Ostrovki Na Newe, Petrokrepost, 1 June 1906 (Yakobson) (1 ♀ USNM), 7 June 1906 (Yakobson) (1 ♀), 8 June 1906 (1 ♀), 9 June 1906 (Yakobson) (1 ♀), 18 June 1906 (Yakobson) (1 ♀); Perm Oblast, Sverdlovsk, 20 June 1910 (Yakobson) (1 ♀); Amurskaya Oblast, between the rivers Malaya Pera and Bolshoy Ergel, 9 June 1957 (Zinovyey) (1 ♀), 18 June 1957 (Zinovyey) (1 ♀), 28 June 1957 (Zinovyey) (1 ♀); Leningradskaya Oblast, Sablino, 3 July 1922 (Stackelberg) (1 ♂), 1 July 1923 (Stackelberg) (1 ♂ 1 ♀), 23 July 1923 (Stackelberg) (1 ♂ 1 ♀), 5 August 1923 (Stackelberg) (2 ♂); Lake Dolgoe (near Luga, Leningrad Rayon), Luzhskogo U, (Solbsu



Figs. 8-21. *Orhonevra*, genitalia. — 8-14. *intermedia* (Lunbeck). — 15-21. *stackelbergi* n. sp. — 8, 15. Female, lateral view. — 9, 16. Female genital fork, ventral view. — 10, 17. Female, ventral view. — 11, 18. Male 9th tergum, lateral view. — 12, 19. Male surstyle, ventrolateral view. — 13, 20. Aedeagus and associated structures, lateral view. — 14, 21. Male 9th sternum and associated structures, lateral view.

(1 ♂); Pl. Fan-der-flit (now Kolchanovka, s of Luga), Luzhskogo U, 28 June 1925 (Stackelberg) (1 ♂), 7 June 1925 (Stackelberg) (1 ♂); Lifyand (Estonia), Verro (Vyrü), 19 July 1908 (Chekini, Somna) (1 ♀); Rakovichi, V 7 km, K yuyu ot Lugi (7 km s of Luga),

30 May 1897 (Pleske) (1 ♂); Leningradskaya Oblast, Rozhdestveno (9 km from Siverkaya), 28 July 1956 (Stackelberg) (1 ♀); Zhedonovo, Yaroslavl region, 26 May 1917 (Stackelberg) (1 ♂); (Leningrad Rayon), N. Bronnaya, near Petergof, 23 June 1918 (Stackelberg)

(1 ♀). POLAND, Gdovskogo (= Gdovskii Rayon), Uezda (in Pskov region, near Lake Chadskoe), 18 June 1895 (Yakobson) (1 ♂); Bodzentiyn (25 km ENE from Kielce), 7 July 1895 (Yakobson) (1 ♂). NORWAY, Ry: Sandnes, Lutsi, 11 June 1976 (Greve) (1 ♂ in coll. Niclsen); Flisa, HES: Asnes, 30 June 1975 (Nielsen) (1 ♀ in coll. Nielsen).

*Diagnosis:* Indistinguishable from *intermedia* Lundbeck except for the structure of the genitalia. These genitalic differences are figured and listed in the description.

#### Description

*Male genitalia:* Surstyle (Figs. 11, 12) narrower, without a distinct apicomedial emargination (not broader and with a distinct apicomedial notch in *intermedia* Lundbeck (Figs. 18, 19)); superior lobe (Fig. 14) with anterodorsal, medial posteroapical, and a lateral posteroapical hook-like processes (without hook-like processes (Fig. 21)); aedeagus (Fig. 13) with a long ejaculatory process (with a short ejaculatory process (Fig. 20)), with dorsal process bidentate apically and with small lateral processes (with dorsal process unidentate apically and with large, asymmetric lateral processes).

*Female genitalia:* Eight sternum (Fig. 10) concave dorsoapically (not concave (Fig. 17)), membranous and pilose medially (not bare and semisclerotized medially); genital fork (Fig. 9) convex posteriorly (not emarginate posteriorly (Fig. 16)).

#### Remarks

We have been unable to find any external characters that will separate *stackelbergi* from *intermedia* Lundbeck. The only characters of value are those of the genitalia (as outlined above), which are normally retracted into the abdomen. However, if the genitalia are extended on freshly collected material, the species characters can be readily seen without further preparation. Some of the characters that Stackelberg gave in his keys (1953: 347, 1970: 55) are variable. We found that Stackelberg's identified

series of "*intermedia*" (= *stackelbergi*) included both species.

Stackelberg delimited this species, hence our selection of its epithet. However, he incorrectly used the name *intermedia* Lundbeck for it and named the true *intermedia* as his new species, *rossica* Stackelberg (new synonym). Lundbeck (1916: 102) described *intermedia* from eleven males and females from various Danish localities. We have studied the type series, now in the Universitets Zoologiske Museet, Copenhagen, and have selected as lectotype the male labeled as follows: "♂ 22 / 6 15", "Lyngby-Mose", "TYPE", "Coll. / W. Lundbeck". The type-locality of *intermedia*, Lyngby Mose, is north of Copenhagen, at the latitude of Klampenborg, but about 6 kilometers inland.

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