

**Palaearctic species of the subgenus *Gonolochus* Foerster
(Hymenoptera: Ichneumonidae: Tersilochinae: *Tersilochus* Holmgren)**

A.I. Khalaim^{1,2}, A.M. Tereshkin³

**Палеарктические виды подрода *Gonolochus* Foerster
(Hymenoptera: Ichneumonidae: Tersilochinae: *Tersilochus* Holmgren)**

А.И. Халаим^{1,2}, А.М. Терешкин³

¹Zoological Institute, Russian Academy of Sciences, St Petersburg 199034, Russia. E-mail: ptera@mail.ru
Зоологический институт РАН, Санкт-Петербург 199034, Россия

²Facultad de Ingeniería y Ciencias, Universidad Autónoma de Tamaulipas, Ciudad Victoria, Tamaulipas, Mexico.
Факультет инженерии и наук, Автономный университет штата Тамаулипас, Сьюдад Виктория, Тамаулипас, Мексика

³Mendeleeva Street 5–14, Minsk 220037, Belarus
Улица Менделеева 5, кв. 14, Минск 220037, Беларусь

Abstract. Faunistic records of six Palaearctic species of the subgenus *Gonolochus* Foerster (genus *Tersilochus* Holmgren) are provided. Many new country records are given, e.g. first findings of four *Gonolochus* species from Russia. *Tersilochus caudatus* (Holmgren) is abundant Trans-Palaearctic species, while five other species are mainly occur in Europe. *Tersilochus stenocari* (Gregor) is recorded as parasitoid of the weevil *Phrydiuchus topiarius* (Germar) for the first time.

Key words. *Tersilochus*, fauna, Russia, Palaearctic region, new records.

Резюме. Представлены фаунистические находки 6 палеарктических видов подрода *Gonolochus* Foerster (род *Tersilochus* Holmgren). Даны многочисленные новые указания для стран, в том числе 4 вида подрода *Gonolochus* впервые указаны для России. *Tersilochus caudatus* (Holmgren) является обычным транспалеарктическим видом, в то время как пять других видов главным образом обитают в Европе. *Tersilochus stenocari* (Gregor) впервые отмечен как паразитоид долгоносика *Phrydiuchus topiarius* (Germar).

Ключевые слова. *Tersilochus*, фауна, Россия, Палеарктическая область, новые находки.

Introduction

Gonolochus Foerster, 1869 is a small Palaearctic subgenus of the genus *Tersilochus* Holmgren, 1859 comprising six species (Yu *et al.*, 2016). Horstmann (1971) in the first part of his revision of the European Tersilochinae included to *Gonolochus* four species considering it as a separate genus. Subsequently, two more species of *Gonolochus* were described from Bulgaria and Italy (Horstmann, 1981b; Horstmann, Kolarov, 1988), and in the second part of the revision of European Tersilochinae (Horstmann, 1981a) additional faunistic and host records for *Gonolochus* species were given. Species of *Gonolochus* are known as parasitoids of weevil larvae (Coleoptera: Curculionidae).

Only one species, *T. caudatus* (Holmgren, 1860), was known from Russia hitherto (Meyer, 1935; Khalaim, 2007). The aim of this work is to study a new material of the subgenus *Gonolochus* from the Palaearctic region and provide new faunistic records for *Gonolochus* species from Russia and other countries.

Material and methods

This study is based on the ichneumonid collection of the Zoological Institute of the Russian Academy of Sciences, St Petersburg, Russia (ZISP). Additional material was obtained from the following collections and museums: Zoological Museum of the Moscow State University, Moscow, Russia (MSU); Oberösterreichisches Landesmuseum, Linz, Austria (OLML); Zoologische Staatssammlung, Munich, Germany (ZSM); Steinhardt National History Museum and Research Center, Tel Aviv University, Israel (TAU); and Institute of Ecology, Vilnius University, Vilnius, Lithuania (VL).

List of principal taxonomical and faunistic publications is provided for each *Gonolochus* species. In *Material examined* sections, countries are listed in alphabetical order. In *Distribution* sections, countries are listed generally from west to east, and new country records are marked by an asterisk (*).

Results

Genus *Tersilochus* Holmgren, 1859

Subgenus *Gonolochus* Foerster, 1869

The subgenus comprises six species occurring in the Palaearctic region (Yu *et al.*, 2016). Five species are generally restricted to Europe, and the sixth, *T. caudatus*, is abundant and widely distributed through the Palaearctic region.

Extensive faunistic data on distribution of all *Gonolochus* species in the Palaearctic region are provided, including many new country records. Four species are recorded from Russia for the first time, in addition to the previously known *T. caudatus*. Explanations to brief Horstmann (1981a) records of *Gonolochus* species from the former USSR territories are given. *Tersilochus stenocari* (Gregor) is recorded as parasitoid of the weevil *Phrydiuchus topiarius* (Germar) for the first time.

Tersilochus (Gonolochus) caudatus (Holmgren, 1860)

References. Meyer, 1935: 481 (USSR: Leningrad, Yaroslavl, Moscow); Fulmek, 1968: 729 (host); Horstmann, 1971: 110 (Sweden, Norway, Finland, Denmark, England, Germany, Bohemia and Moravia [Czech Republic], Hungary, Transilvania [Romania], Serbia, Bessarabia [Moldova/Ukraine], Tyrol [Austria], Switzerland, Italy, France); 1981a: 21 (Ireland, Belgium, Slovakia, “West- und Mittelrußland” [see *Remarks below*], Ukraine, Caucasus, Austria, Yugoslavia); Kolarov, 1987: 30 (Bulgaria); Aeschlimann 1990: 295 (Romania); Khalaim, 2007: 597 (widespread in the Palaearctic region); Khalaim, Yurtcan, 2011: 391 (Turkey); Khalaim *et al.*, 2014: 31 (South Korea); Khalaim, 2016: 268 (Austria, Belarus, Belgium, Bulgaria, Croatia, Czech Republic, Estonia, Italy, Latvia, Lithuania, Norway, Poland, Slovakia, Slovenia, Sweden, Switzerland, Turkey, United Kingdom); Khalaim, Tereshkin, 2018: 166 (Belarus); Khalaim, Várkonyi, 2018: 181 (Finland; Russia: Karelia).

Material examined. AZERBAIJAN. Lankaran Region, Gosmalyan [Qosmalyan], 9.VI.1966 (D. Kasparyan leg.), 1 female (ZISP); Nakhchivan Autonomous Republic, 5 km W of Ordubad, Akulis, 20.V.1974 (V. Richter leg.), 1 female (ZISP); same locality, 10.IV–2.V.1982 (D. Kasparyan leg.), 16 females, 6 males (ZISP). GEORGIA. Samtskhe-Javakheti, Bakuriani, botanical garden, 1800 m, 9.VI.1981 (V. Tobias leg.), 4 females, 1 male (ZISP). KAZAKHSTAN. Almaty Province: Talgar, 43°29.06'N, 77°30.62'E, Malaise trap, 7–21.V.2013 (V. Barták leg.), 1 female, 1 male (OLML); S of Almaty, Kamenka, meadow near garden, 8–13.V.1989 (V. Tobias leg.), 9 females, 1 male (ZISP); SW of Almaty, Aksayskoe Canyon, on Ferula, 4.VI.1985 (M. Kovalev leg.), 2 females, 1 male (ZISP); S of Almaty, Bolshoe Almaatinskoe [Big Almaty] Canyon, 19.V.1985 (M. Kovalev leg.), 1 female (ZISP); same locality, garden, 6.V.1982 (V. Tobias leg.), 2 females (ZISP); “Kirgyzstan” (label error), Ketmen Mts, “Tujuk” [Tuyuk], 2000–2800 m, VI–VII.1999 (V. Gurko leg.), 1 female (OLML). Jambyl Province: “40 km” E of Merke [Merki], Novovoskresenovka, 4.V.1994 (J. Halada leg.), 2 females (OLML). South Kazakhstan Province: Saryagash District, W of Alkakolkum Sands, right bank of Syr Darya River, 6.V.1968 (D. Kasparyan leg.), 1 female (ZISP); 70 km E of Shymkent, Vannovka, meadow, 3.V.1982 (S. Belokobylskij leg.), 1 female (ZISP). East Kazakhstan Province: Zaysan District, 8 km above

Kenderlyk, floodplain of Kenderlyk River, 4–14.VI.1961 (V. Tobias leg.), 9 females, 1 male (ZISP); Zaysan District, 5 km W of Maykapchagay [Maykapchigay], 30.V.1961 (V. Tobias leg.), 1 female (ZISP). KYRGYZSTAN. Chuy Province: Ala-Archa River, 1600 m, Malinovka, V.2000 (V. Gurko leg.), 1 female (OLML); urochishche Kalmak-Ashuu, Dzhetimbel Range, 4.VIII.1972, [collector absent], 1 female (ZISP). Osh Province: 3 km S of Naukat [Nookat], Karagoy [Canyon], 2500 m, 6.VI.1978 (V. Tanasijtshuk leg.), 1 female (ZISP). Issyk-Kul [Ysyk-Köl] Province: Przhevalsk [Karakol], 5–9.V.1943 (A. Lyubishchev leg.), 2 females, 1 male (MSU). LATVIA. near Bauska, 25.V.1954 (V. Negrobov leg.), 1 female (ZISP); Aizpute District, “kolkhoz Pavasaris”, 29.V.1954 (V. Negrobov leg.), 1 female (ZISP). LITHUANIA. “Юрбургъ” [Jurbarkas], “Виноград[ов]-Никит[ин]”, 15.V.1905, 1 female (ZISP). MOLDOVA. Kishinev, park, 12.V.1980 (W. Kuslitzky leg.), 2 females, 3 males (TAU); Edintsy, forest, 2.VI.1987 (W. Kuslitzky leg.), 1 female (TAU); Kalarash, 1.V.1980 (W. Kuslitzky leg.), 5 females, 12 males (TAU); same data, but 22.V.1979, 1 female (TAU). MONGOLIA. Dornod Aimag: 15 km N of Khukh Lake, Duro Lake, 27–28.VI.1976 (M. Kozlov leg.), 1 specimen (metasoma destroyed, sex unknown; ZISP). Khövsgöl Aimag: 15 km SE of Tosol-Tsangal, Selenga River, 25.VII.1975 (E. Narchuk leg.), 1 female (ZISP); 20 km SE of Tosolsengel, Selenga River, 24–25.VII.1975 (M. Kozlov leg.), 2 females (ZISP). Töv Aimag: Ulaanbaatar, Tuul River valley, 20.VI.2003 (J. Halada leg.), 2 females (OLML); 50 km E of Ulaanbaatar, Tuul River, 22.VI.2003 (J. Halada leg.), 6 females and males (OLML).Uvs Aimag: Uureg Lake, mouth of Karga River, 6.VII.1978 (M. Kozlov leg.), 1 female (ZISP). Zavkhan Aimag: “W”, 40 km SW of Uliastay, dunes, 18.VII.2005 (J. Halada leg.), 2 females (OLML); Songino, 12.VI.1980 (M. Kozlov leg.), 2 females, 2 males (ZISP). RUSSIA. Vologda Province: “Вологодск. губ.”, 22.VI.1902 (D. Pomerantsev leg.), Kokuev collection, 1 female (ZISP). Kaliningrad Province: Curonian Spit, Rybachy, Biological Station, reed and willows, 24–26.V.2001 (A. Khalaim leg.), 2 females (ZISP). Republic of Karelia: Onega Lake, Bukolnikov Island, 25.VI.2003 (A. Humala leg.), 4 females (ZISP). Leningradskaya Province: 70 km N of Leningrad [St Petersburg], Sosnovo, willows near lake, 2–3.VI.1973 (D. Kasparyan leg.), 5 females, 1 male (ZISP; 4 females, K. Horstmann det.); NW of Leningrad [St Petersburg], Solnechnoe, 10.VI.1980 (V. Tobias leg.), 3 females (ZISP); Leningrad [St Petersburg], Vasilyevskiy Island, 10.VI.1991 (A. Matov leg.), 1 female (ZISP); “Лебяжье [W of St Petersburg, Lebyazh'e]. Петергоф у. Чекини [Peterhof District, Chekini] 13.VI.[18]99”, 1 female (ZISP); Ladoga Lake Railway Station [SE of St Petersburg], 16.VI.1981 (V. Trjapitzin leg.), 1 female (ZISP); 19 km S of Leningrad [St Petersburg], Pushkin, 29.V.1984 (D. Kasparyan leg.), 3 females (ZISP); 43 km S of Leningrad [St Petersburg], Semirino, 9.VI.1973 (D. Kasparyan leg.), 2 females, 1 male (ZISP; K. Horstmann det.); 55 km S of Leningrad [St Petersburg], Krasnitsy, 8.VI.1980 (D. Kasparyan leg.), 1 male (ZISP); 55 km S of St Petersburg, 4 km W of Krasnitsy, aspen forest, Malaise trap, 9–31.V.2008 (D. Kasparyan leg.), 15 females, 6 males (ZISP); same data, but 4–12.VI.2011, 5 females (ZISP); same data, but 11–24.VI.2012, 2 females (ZISP). Novgorod Province: 20 km NW of Pestovo, Tychkino, 27–28.VI.1990 (V. Tobias leg.), 1 female (ZISP); same data, but 1–13.VI.1993, 5 females, 1 male (ZISP); same data, but 17.VI.2000, 1 female (ZISP); same data, but 17.VI.2001, 1 female (ZISP). Moscow Province: Pushchino, 54.83°N, 37.69°E, 177 m, 7.VI.2015 (K. Tomkovich leg.), 1 female (MSU); SE of Moscow, N of Vidnoe, 26.V.2008 (K. Tomkovich leg.), 1 female (MSU); Oreckovo, 23.V.1987 (V. Barták leg.), 21 females and males (OLML); Losiny Ostrov [Elk Island], 26.V.1989 (V. Barták leg.), 7 females, 8 males (OLML); Abramtsevo, 28.V.1989 (V. Barták leg.), 1 female (OLML). Ryazan Province: “Данк. у.” [former Dankov Uezd], Gremyachka, 27.V.1908 (A. Semenov leg.), 1 female (ZISP). Yaroslavl Province: Yaroslavl, Kokuev collection, 7.V–1.VI.1895, 2 females, 4 males (ZISP); same locality and collector/collection, without date, 11 females, 1 male (ZISP; 2 females, K. Horstmann det.). “Gedenowo”, “Dan.” [former Danilov Uezd], 27.V–5.VI.1918 (A. Shestakov leg.), 6 females, 3 males (ZISP); same data, but 9.VII.1916, 1 female (ZISP). Kostroma Province: Ponazyrevo, 27.V.1954 (Toskina leg.), 1 male (MSU); Kostroma, 8.VI.1954 (Toskina leg.), 2 males (MSU). Ulyanovsk Province: Ulyanovsk, left bank of Volga River, 80 m, 14.VIII.1990 (Z. Yefremova leg.), 3 females, 2 males (ZISP). Republic of Crimea: Dzhankoy District, Solyone Ozero [village Salted Lake], 4.V.2000, (Martynov leg.), 1 female (ZISP); Krasnoles'e, 450 m, 6–12.V.1983 (A. Zagulajev leg.), 6 females, 1 male (ZISP); Ay-Petri Yayla [Plateau], 1200 m, 28.V.1983 (A. Zagulajev leg.), 3 females (ZISP); Simferopol, 3 km NNW of Dubki, 22.IV.1989 (D. Kasparyan leg.), 1 male (ZISP); Crimean Nature Reserve, Babugan-Yayla [Mountains], 28.VI.1978 (D. Kasparyan leg.), 1 female (ZISP). Kursk Province: Manturovo District, Central Chernozem [Black Earth] Nature Reserve, Bokreevy Barmy, 6.V.2008 (K. Tomkovich leg.), 1 female (ZISP); Central Chernozem [Black Earth] Nature Reserve, Streletskaya Step' [Steppe], 5–10.V.2008 (K. Tomkovich leg.), 1 female, 2 males (MSU); Central Chernozem [Black Earth] Nature Reserve, Selikhova, 31.V.1937 (D. Dovnar leg.), 1 female (MSU). Voronezh Province: Ramon, 27.V.1952 (V. Negrobov leg.), 1 female (ZISP); Voronezh Nature Reserve, 13.V.1950 (D. Dovnar leg.), “Diaparsis longulus Gr. det. D. Dovnar”, 1 male (MSU); same locality and collector, 15.V.1950, “Leptopygus nigricornis Szepl. det. D. Dovnar”, 1 male (MSU); same locality, date and collector, “Diaparsis erythrostomus Gr. det. D. Dovnar”, 1 female (MSU); same locality and collector, 22.V.1950, “Diaparsis genalis Thoms. det. D. Dovnar”, 1 female (MSU). Rostov Province: left bank of Don River, in front of Konstantinovsk, 16.V.1986 (D. Kasparyan leg.), 2 females (ZISP). Krasnodar Territory: Armavir, floodland of Urup River, 13.V.1972 (D. Kasparyan leg.), 2 females (ZISP; 1 female, K. Horstmann det.); NW of Sochi, Lazarevskoe, forest, 8–9.V.1975 (V. Tobias leg.), 1 female (ZISP); same locality, 10–23.IV.1975 (A. Jaki-mavičius and V. Jonaitis leg.), 1 female, 5 males (VL). 20 km SW of Kislovodsk, Medovye [Honey] Waterfalls, near stream, 20.V.2009 (D. Kasparyan leg.), 3 females, 1 male (ZISP). Karachai-Cherkess Republic: Teberda, 1300 m, broadleaf forest, manor in the nature reserve, 26–30.V.2009 (D. Kasparyan leg.), 3 females (ZISP). Stavropol Territory: Kislovodsk, Lermontov Rock, meadow, forest, 29.IV.2018 (S. Belokobylskij leg.), 2 females (ZISP). North Ossetia: canyon of Ardon River, 15 km N of Mamisoni Pass, 13.VI.1972 (D. Kasparyan leg.), 2 females (ZISP; 1 female, K. Horstmann det.). Republic of Dagestan: 10 km W of Khunzakh, 4.VI.1972 (D. Kasparyan leg.), 1 male (ZISP). North Caucasus [region unknown]: Terskiy Range, “ущ.

Гонкызылъц” [Gonkyzylsch Canyon], 1.VI.1953 (N. Filippova leg.), 11 females, 5 males (MSU). *Kirov Province*: Urzhum, 25.V–10.VI.1900 (Krulikovskiy leg.), 1 female (ZISP; K. Horstmann det.). *Sverdlovskaya Province*: Ekaterinburg, 11.V.2005 (T. Kostromina leg.), 1 female (ZISP); W of Ekaterinburg, Verkh-Isetskiy Prud (pound), 3.VI.2005 (T. Kostromina leg.), 3 females, 3 males (ZISP). *Altai Republic*: Chuya Steppe, Kosh-Agach, 16–22.VI.1964 (M. Kozlov leg.), 3 females (ZISP). *Kemerovo Province*: Prokopyevsk, Novostroyka, 13–22.VI.1958, [collector unknown], 3 females, 1 male (ZISP). *Krasnoyarsk Territory*: Krasnoyarsk, Akademgorodok, birch forest, 7.VII.1988 (D. Kasparyan leg.), 3 females (ZISP); Yartsevo, Enisei River, 15.VII.1988 (D. Kasparyan leg.), 1 female (ZISP). *Republic of Tuva (Тыва)*: Turan, floodland of Turanchik River, 3.VI.1975 (D. Kasparyan leg.), 1 male (ZISP). *Irkutsk Province*: 10 km E of Bolshie Koty, 17–18.VI.1970 (D. Kasparyan leg.), 7 females, 3 males (ZISP); Bolshie Koty, Baykal Lake, 21.VI.1970 (D. Kasparyan leg.), 3 females (ZISP); Irkutsk (V. Yakovlev leg.), Kokuev collection, 1 female (ZISP); Irkutsk, “[18]98” (V. Yakovlev leg.), “Mus. Petropol”, 1 female (ZISP); 32 km S of Irkutsk, Dachnaya Station, 30.V–5.VI.1970 (D. Kasparyan leg.), 14 females, 10 males (ZISP); same data, but 20–21.VI.1971, 3 females, 1 male (ZISP); same data, but 11.VI.1975, 1 female (ZISP); 40 km S of Irkutsk, Rossokha [Rossokha], 13–14.VI.1975 (D. Kasparyan leg.), 10 females, 1 male (ZISP); SSW of Irkutsk, Bolshoy Lug, right bank of Olkha River, 21.VI.1971 (D. Kasparyan leg.), 1 female (ZISP); 20 km W of Baikal Lake, Tibel’ti, 10.VI.1970 (D. Kasparyan leg.), 1 female (ZISP). *Republic of Buryatia*: Verkhneudinsk [Ulan-Ude], 4.VII.1924, Vinogradov leg.), 1 female (ZISP); Ust’-Kiryan, Chikoy River, 27.V.2008 (M. Proshchalykin leg.), 1 female (ZISP); 20 km W of Gusinoe Lake, 27.V.1970 (D. Kasparyan leg.), 1 female, 1 male (ZISP); Gusinoe Lake, 28.V.1970 (D. Kasparyan leg.), 1 male (ZISP); Selenduma, floodplain of Selenga River, 23–24.VI.1971 (D. Kasparyan leg.), 4 females, 1 male (ZISP); Selenduma, mouth of Temnik River, 25.VI.1971 (D. Kasparyan leg.), 2 females (ZISP). *Republic of Sakha (Yakutia)*: Khomurgan Arbyn, mouth of Aldan River, 5.VII.1926, Moskvina leg.), 1 female (ZISP). *Zabaikalskiy Territory*: Bylyra, 19–22.VI.1975 (D. Kasparyan leg.), 1 female, 2 males (ZISP); 9 km N of Kurort-Darasun, 27.VI.1975 (D. Kasparyan leg.), 1 female (ZISP); 9 km ENE of Sokhondo, Yablonovo, 21.VI.1940 (A. Romanov leg.), 1 female (MSU). *Khabarovsk Territory*: Khekhtsy Range, km 18–24, 4–20.VI.1983 (D. Kasparyan leg.), 14 females, 12 males (ZISP); 15 km N of Bikin, Shivki River, 2.VI.1983 (D. Kasparyan leg.), 1 female (ZISP); 12 km W of Birobidzhan, Kirga, forest (mostly oaks), 16.VI.1983 (D. Kasparyan leg.), 4 females, 1 male (ZISP). *Primorskiy Territory*: Vladivostok, Okeanskaya, forest, 23.VI.1981 (D. Kasparyan leg.), 2 females (ZISP); 12 km SSE of Komissarovo, 44.863°N, 131.753°E, 340 m, 2.VI.2016 (S. Belokobylskij leg.), 3 females (ZISP); Komissarovo, 45.000°N, 131.788°E, 130 m, 4.VI.2016 (S. Belokobylskij leg.), 1 female (ZISP); same date and collector, 7 km SSE of Komissarovo, 45.939°N, 131.821°E, 1 female (ZISP); Zolotaya Dolina [Gold Valley], 42.943°N, 133.161°E, 40 m, 10.VI.2016 (S. Belokobylskij leg.), 1 female (ZISP); 20 km SE of Ussuriysk, Gornotaehnoe, forest, 31.V–1.VI.1990 (S. Belokobylskij leg.), 4 females (ZISP); same locality, Malaise trap, 11–23.VI.2003 (M. Mikhailovskaya leg.), 3 females, 1 male (ZISP); 30 km SE of Ussuriysk, Kamennushka, 3–13.VI.1989 (A. Kirejtsuk leg.), 2 females (ZISP); 50 km SEE of Ussuriysk, Suvorovka River, 13.VI.1993 (S. Belokobylskij leg.), 2 females (ZISP); W of Spassk-Dal’nyi, 31.V.1985 (S. Belokobylskij leg.), 2 females (ZISP); Lyalichi, Ilistaya River, forest, 4.VI.1990 (S. Belokobylskij leg.), 1 female (ZISP); Chernigovka District, 15 km E of Dmitrievka, Merkushevka, forest, 5.VI.1990 (S. Belokobylskij leg.), 1 female (ZISP); Chuguevka District, N of Samara River, forest, 29.V.1993 (S. Belokobylskij leg.), 2 females (ZISP); Anisimovka, 9.VI.1993 (S. Belokobylskij leg.), 1 female (ZISP). *TADJIKISTAN*: Ramit [Romit], river, 6.V.1964 (V. Tobias leg.), 3 females (ZISP). *UKRAINE*. *Donetsk Province*: NNE of Amvrosievka, near Blagodatnoe, Yasenevoe, steppe, 15.V.1974 (D. Kasparyan leg.), 1 female (ZISP). *Kyiv Province*: Kyiv, Lukyanovka [Lukyanivka], 18.V.1917, [collector unknown], 1 female (ZISP); Fastov [Fastiv], 11.V.2003 (A. Kotenko leg.), 1 female, 2 males (ZISP); N of Obukhov [Obukhiv], right bank of Stuhna River, Tarasovka [Tarasivka], forest, 17.V.2013 (D. Kasparyan leg.), 2 females (ZISP); 77 km ESE of Kyiv (highway to Kharkiv), forest, 10.V.1972 (D. Kasparyan leg.), 1 female (ZISP; K. Horstmann det.); 110 km SSE of Kyiv, Kanev, “Svetly Les” [Light Forest], 21–22.V.1975 (V. Tobias leg.), 2 females (ZISP). *Luhansk Province*: N of Antratsyt, urochishche Lby, forest, 5.V.1974 (D. Kasparyan leg.), 1 male (ZISP; K. Horstmann det.). *Odessa Province*: Lesnoe, forest, 11.VI.1974 (D. Kasparyan leg.), 1 female (ZISP). *Poltava Province*: “Poltawa, Ogloblin 1.V.1914”, 1 female (ZISP). *Zaporizhia Province*: 18 km NE of Melitopol, Staroberdyanskoe Forestry, 24.V.1974 (D. Kasparyan leg.), 1 female (ZISP). *UZBEKISTAN*: 10 km S of Chirik, foothill of Chatkal Range, 800 m, 16.IV.1982 (V. Tobias leg.), 1 male (ZISP).

Distribution. Russia (European part, Caucasus, Urals, Siberia, Far East). – Widespread and abundant in the Palaearctic region. Occurs almost everywhere in Western Europe; also recorded from Estonia, Latvia, Lithuania, Belarus, Moldova, Ukraine, *Georgia, *Azerbaijan, Turkey, *Kazakhstan, *Tajikistan, *Kyrgyzstan, *Uzbekistan, *Mongolia, South Korea.

Biology. Recorded as parasitoid of *Ceutorhynchus pleurostigma* Marsch. and *Dorytomus taeniatus* F. (Curculionidae).

Remarks. Horstmann (1981a) recorded this species from “West- und Mittelußland”, Ukraine and Caucasus on the basis of the materials from ZISP and Townes collection (USA), but without any details. Specimens of *T. caudatus* in the ZISP collection bearing Horstmann identification labels were examined (see *Material examined* section), those are from Kirov, Krasnodar, Leningradskaya and Yaroslavl provinces and Republic of North Ossetia of Russia, and Kyiv and Luhansk Provinces of Ukraine; and two more females from Ukraine actually belong to *T. nitens* Horstmann et Kolarov (see *Remarks* section under this species).

***Tersilochus (Gonolochus) fenestralis* (Thomson, 1869)**

References. Horstmann, 1971: 112 (Germany, Bohemia and Moravia [Czech Republic], Slovakia, Hungary, Bessarabia [Moldova/Ukraine], “Lower Austria” [Austria], France); Horstmann, 1981a: 21 (Poland, Ukraine); Kolarov, 1987: 31 (Bulgaria); Aeschlimann, 1990: 295 (Turkey); Khalaim, 2016: 269 (Bulgaria, the Netherlands).

Material examined. RUSSIA. Republic of Crimea: Kara-Dag Range, 11.V.1972 (V. Jonaitis leg.), 5 females, 9 males (3 females, 7 males in VL; 2 females, 2 males in ZISP); same locality, steppe, 11–13.V.1972 (V. Tobias leg.), 3 females, 3 males (ZISP); Evpatoria (V. Yakovlev leg.), N. Kokujev collection, 1 female (ZISP); Kerch, 24.IV.1901 (N. Kuznetsov leg.), 1 male (ZSM). Republic of Dagestan: 8 km N of Kizilyurt, steppe, 17.V.1972 (D. Kasparyan leg.), 1 female (ZISP). UKRAINE. Donetsk Province: SE of Debaltsevo, Olkhovatka, urochishche Ploskoe, steppe, 11.V.1974 (D. Kasparyan leg.), 2 females (ZISP; K. Horstmann det.). Luhansk Province: N of Antratsyt, urochishche Lby, forest, 9.V.1974 (D. Kasparyan leg.), 3 females (ZISP; K. Horstmann det.); 3 km NW of Antratsyt, 10.V.1974 (D. Kasparyan leg.), 1 female (ZISP; K. Horstmann det.).

Distribution. *Russia (Crimea, Dagestan). – France, Austria, Germany, the Netherlands, Czech Republic, Slovakia, Poland, Hungary, Bulgaria, Turkey, ? Moldova, Ukraine.

Remarks. Horstmann (1981a) recorded this species from Ukraine on the basis of the material from ZISP, but without any details. Specimens of *T. fenestralis* in the ZISP collection bearing Horstmann identification labels were examined (see *Material examined* section), those are from Donetsk and Luhansk provinces of Ukraine.

***Tersilochus (Gonolochus) nitens* Horstmann et Kolarov, 1988**

References. Horstmann, Kolarov, 1988: 275 (Bulgaria); Gürbüz *et al.*, 2011: 34 (Turkey); Khalaim, Yurtcan, 2011: 391 (Turkey); Khalaim, 2016: 269 (Austria, Bulgaria, Turkey).

Material examined. ARMENIA. Erevan, old garden, 12.V.1969 (V. Tobias leg.), 1 female (ZISP). AZERBAIJAN. Lankaran: SW of Lerik, Gosmalyan, 11.VI.1981 (A. Kotenko leg.), 1 female (ZISP). Nakhchivan: 35 km N of Nakhchivan, Buzuevo [? Buzgov], 19.VI.1985 (V. Tobias leg.), 1 female (ZISP); Zangezur Mts, Shahbuz Forest, 22.VI.1967 (D. Kasparyan leg.), 1 female (ZISP). GEORGIA. Kakheti: Vashlovani Nature Reserve, forest, 14–16.V.1969 (V. Tobias leg.), 1 female (ZISP). Samtskhe-Javakheti: Akhaltsikhe District, “Hagi”, 24.VI.1978 (V. Richter leg.), 1 female (ZISP). RUSSIA. Republic of Crimea: Kara-Dag Mts, 10.V.1939 (A. Lyubishchev leg.), 1 female (ZISP); N of Alushta, Luchistoe, 12.VI.1976 (V. Jonaitis leg.), 1 female (VL); Nikitsky Botanical Garden, 24.V.1974 (V. Jonaitis leg.), 1 female (ZISP); Nikitsky Botanical Garden, Cape Martyan, 26.V.1990 (D. Kasparyan leg.), 1 female, 1 male (ZISP). Krasnodar Territory: Gelendzhik, 4.V.1975 (V. Jonaitis leg.), 2 females (VL). UKRAINE. Kherson Province: Askania-Nova, virgin steppe, 26 and 28.V.1974 (D. Kasparyan leg.), 2 females (ZISP; “*Gonolochus caudatus*”: K. Horstmann det.). Zaporizhia Province: Vasylivka Forestry, “Lysaya Gora”, 10.V.1978 (V. Tolkanitz leg.), 1 female (ZISP).

Distribution. *Russia (Crimea, Krasnodar). – Austria, Bulgaria, *Georgia, *Armenia, *Azerbaijan, Turkey, *Ukraine.

Remarks. Two females from Ukraine identified by Horstmann (1981a) as *Gonolochus caudatus* actually belong to this species.

***Tersilochus (Gonolochus) rugulosus* Horstmann, 1981**

References. Horstmann, 1981b: 156 (Italy; host); Khalaim, Yurtcan, 2011: 391 (Turkey); Khalaim, 2016: 269 (Serbia, United Kingdom).

Material examined. BULGARIA. Rhodope Mts, 24.III and 17.IV.1977 (J. Kolarov leg.), 2 females (ZISP; K. Horstmann det.); Sadovo, 13.IV.1987 (J. Kolarov leg.), 1 female (ZISP). RUSSIA. Krasnodar Territory: NW of Sochi, Lazarevskoe, 7.IV.1975 (V. Tobias leg.), 1 female (ZISP).

Distribution. *Russia (Krasnodar). – Italy, United Kingdom, Serbia, Bulgaria, Turkey.

Biology. Recorded as parasitoid of *Ceutorhynchus horridus* (Panzer) (Curculionidae) on *Carduus macrocephalus* Desf. and *Galactites tomentosa* Moench (Asteraceae).

***Tersilochus (Gonolochus) stenocari* (Gregor, 1941)**

References. Aubert, 1959: 164 (France); Aubert, Jourdheuil, 1959: 189 (France; host); Horstmann, 1971: 110 (? Tunisia, Germany, Moravia [Czech Republic], Spain; host); Horstmann, 1981a: 21 (Hungary, Istria [Croatia/Slovenia/Italy]); Horstmann, 1981b: 157 (host); Zapryanov, 1985: 136 (Bulgaria; host); Šedivý, 1989: 81 (Czech Republic); Kaźmierczak, 1993: 97 (Poland; host); Rodríguez-Berrío *et al.*, 2010: 58 (Spain); Schwarz *et al.*, 2011: 258 (Austria); Khalaim, 2016: 269 (Bulgaria).

Material examined. RUSSIA. Republic of Crimea: NW of Simferopol, oak forest, 22.IV.1989 (D. Kasparyan leg.), 1 female (ZISP); Kerch, [without date] (A. Kirichenko leg.), 1 female (ZISP); "Sebastopol" [Sebastopol], "хут. Делагарда" [homestead Delagarda], 1.IV.1908 (W. Pliginski leg.), 1 female (ZISP); "Sebastopol" [Sebastopol], "Микенъз[и]евы горы" [Mikenziev Mountains], 13.IV.1911 (W. Pliginski leg.), 1 female (ZISP); Belogorsky District, "ex *Ceuthorrhynchus topiarius* Germ.", ? 1967, Chumak leg.), 4 females, 2 males (ZISP). Samara Province: Sergievsk, Antonovka, ex *Stenocarus fuliginosus*, VII.1980 (Mel'nikova leg.), 2 females (ZISP).

Distribution. *Russia (Crimea, Samara). – ? Tunisia, Spain, France, Germany, Austria, Czech Republic, ? Croatia, Poland, Hungary, Bulgaria.

Biology. Recorded as parasitoid of *Ceutorhynchus picitarsis* (Gyllenhal), **Phrydiuchus topiarius* (Germar), *Stenocarus cardui* (Herbst) and *S. ruficornis* (Stephens) (= *fuliginosus* Marsham) (Curculionidae).

***Tersilochus (Gonolochus) thuringiacus* (Gravenhorst, 1911)**

References. Horstmann, 1971: 111 (Germany, "Lower Austria" [Austria]); Horstmann, 1981a: 21 (Ukraine); Kolarov, 1987: 31 (Bulgaria); Khalaim, 2016: 269 (Austria, Bulgaria, Slovenia); Holý, Zeman, 2018: 104 (Czech Republic).

Material examined. UKRAINE. Luhansk Province: 3 km of Antratsyt, forest, 1.V.1974 (D. Kasparyan leg.), 1 female (ZISP; K. Horstmann det.); 15 km E of Sverdlovsk [Dovzhansk], Provalska Step' [Steppe] Nature Reserve, 7.V.1974 (D. Kasparyan leg.), 1 female (ZISP; K. Horstmann det.).

Distribution. Austria, Germany, Czech Republic, Slovenia, Bulgaria, Ukraine.

Remarks. Horstmann (1981a) recorded this species from Ukraine on the basis of the material from ZISP, but without any details. Specimens of *T. thuringiacus* in the ZISP collection bearing Horstmann identification labels were examined (see *Material examined* section), those are from Luhansk Province of Ukraine.

Acknowledgements

We are thankful to Wolf Kuslitzky (TAU), Martin Schwarz (OLML) and Konstantin Tomkovich (Moscow) for loaning of valuable material. This work was supported by the Russian Foundation for Basic Research (grants nos 16–54–00041_Бел_a, 18–54–00011_Бел_a and 19–04–00027) and the Russian State Research Project No. AAAA–A19–119020690101–6.

References

- Aeschlimann J.-P. 1990. The species of Ichneumonidae (Hymenoptera) occurring in fields of *Medicago* spp. in the Mediterranean region. *Mitteilungen der Schweizerischen Entomologischen Gesellschaft*, **63**(3–4): 291–297.
<https://doi.org/10.5169/seals-402400>
- Aubert J.F. (1958) 1959. Les Ichneumonides du rivage méditerranéen Français (Côte d'Azur) (Hym.). *Annales de la Société Entomologique de France*, **127**: 133–166.
- Aubert J.F., Jourdheuil P. (1958) 1959. Nouvelle description et biologie de quelques Ichneumonides appartenant aux genres *Aneuclis* Först., *Isurgus* Först. et *Thersilochus* Holm. *Revue de Pathologie Végétale et d'Entomologie Agricole de France*, **38**: 175–193.
- Fulmek L. 1968. Parasitinsekten der Insekten Gallen Europas. *Beiträge zur Entomologie*, **18**: 719–952.
- Gürbüz M.F., Kolarov J.A., Özdan A., Tabur M.A. 2011. Ichneumonidae (Hymenoptera) fauna of natural protection areas in East Mediterranean region of Turkey, part I. *Journal of the Entomological Research Society*, **13**(1): 23–39.
- Holý K., Zeman V. 2018. Catalogue of Ichneumonidae (Hymenoptera) of the Czech and Slovak Republics. *Acta Musei Moraviae, Scientiae biologicae (Brno)*, **103**(1): 1–119.
- Horstmann K. 1971. Revision der europäischen Tersilochinen I (Hymenoptera, Ichneumonidae). *Veröffentlichungen der Zoologischen Staatssammlung (München)*, **15**: 47–138.
- Horstmann K. (1980) 1981a. Revision der europäischen Tersilochinen II (Hymenoptera, Ichneumonidae). *Spixiana*, Supplement **4**: 1–76.
- Horstmann K. 1981b. Zwei neue Arten der Gattungen *Phygadeuon* Gravenhorst und *Tersilochus* Holmgren, die aus phytophagen Insekten an Disteln gezogen wurden (Hymenoptera, Ichneumonidae). *Spixiana*, **4**(2): 153–158.
- Horstmann K., Kolarov J.A. (1987) 1988. Neue Tersilochinen-Arten aus Bulgarien (Hymenoptera, Ichneumonidae). *Spixiana*, **10**(3): 271–277.

- Kaźmierczak T. 1993. Ichneumonidae (Hymenoptera) of selected regions of southern Poland. *Acta Zoologica Cracoviensis*, **36**(1): 77–120.
- Khalaïm A.I. 2007. 17. Subfamily Tersilochinae. In: Lelej A.S. (Ed.). *Key to insects of the Russian Far East. Neuropteroidea, Mecoptera, Hymenoptera*. Vladivostok: Dal'nauka, **4**(5): 566–597. (In Russian.)
- Khalaïm A.I. 2016. Faunistic records of Tersilochinae (Hymenoptera: Ichneumonidae) from the West Palaearctic region. *Zoosystematica Rossica*, **25**(2): 255–272.
- Khalaïm A.I., Tereshkin A.M. 2018. A review of the subfamily Tersilochinae (Hymenoptera: Ichneumonidae) from Belarus. *Zoosystematica Rossica*, **27**(1): 157–168.
- Khalaïm A.I., Várkonyi G. 2018. A review of Tersilochinae (Hymenoptera: Ichneumonidae) of Finland. Part 1: taxonomy. *Zootaxa*, **4369**(2): 151–185. <https://doi.org/10.11646/zootaxa.4369.2.1>
- Khalaïm A.I., Yurtcan M. 2011. A survey on Tersilochinae (Hymenoptera: Ichneumonidae) species of Turkey, with a key to European genera. *Turkish Journal of Zoology*, **35**(3): 381–394. <https://doi.org/10.3906/zoo-0904-11>
- Khalaïm A.I., Balueva E.N., Kim K.-B., Lee J.-W. 2014. Review of the genus *Tersilochus* Holmgren (Hymenoptera, Ichneumonidae, Tersilochinae) from South Korea. *Journal of Hymenoptera Research*, **36**: 27–51. <https://doi.org/10.3897/JHR.36.6548>
- Kolarov J.A. 1987. A study on Bulgarian Tersilochinae (Hymenoptera, Ichneumonidae). *Acta Zoologica Bulgarica*, **33**: 26–32.
- Meyer N.F. 1935. *Parasitic Hymenoptera of the family Ichneumonidae of the USSR and adjacent countries. Vol. IV. Ophioninae*. Leningrad: Academy of Sciences of the USSR. 535 pp. (In Russian).
- Rodríguez-Berrío A., Mazón M., Bordera S. 2010. Estudio de la fauna de Ichneumonidae cenobiontes (Hymenoptera) en un ecosistema de montaña mediterránea, II. Subfamilias Cremastinae y Tersilochinae. *Boletín de la Asociación Española de Entomología*, **34**(1–2): 39–66.
- Schwarz M., Link A., Pöll N., Ambach J., Rabitsch W. 2011. Zur Kenntnis der Insektenfauna des Welser Flugplatzes in der Welser Heide (Österreich: Oberösterreich). *Beiträge zur Naturkunde Oberösterreichs*, **21**: 241–285.
- Šedivý J. 1989. Ichneumonidae. In: Šedivý J. (Ed.). *Enumeratio insectorum Bohemoslovakiae. Check list of Czechoslovak insects III (Hymenoptera)*. Acta Faunistica Entomologica Musei Nationalis Pragae, **19**: 49–94.
- Zapryanov A. 1985. The parasites of the family Ichneumonidae in Bulgaria and their hosts in the various agroecosystems. *Soil Science, Agrochemistry and Plant Protection (Sofia)*, **20**(4): 135–145. (In Bulgarian.)
- Yu D.S.K., van Achterberg C., Horstmann K. 2016. *Taxapad 2016, Ichneumonoidea 2015. Database on flash-drive*. Nepean, Ontario, Canada.