

Annotated checklist of the Hydraenidae of Armenia

(Coleoptera: Hydraenidae)

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Abstract

The hydraenid fauna of Armenia is updated based mainly on the examination of the collection of S.M. Yablokov-Khnzorian (1904–1996), as well as on specimens collected by H. Shaverdo & H. Schillhammer in 2001 and by K. Hadulla in 2009. A total of 37 named species is recorded from Armenia, 24 of them for the first time. Two unidentified Armenian species are also reported. A lectotype is designated for *Limnebius setifer* KHNZORIAN, 1962. *Hydraena armeniaca* JANSENS, 1968 and *Limnebius setifer* KHNZORIAN, 1962 are reported from Turkey for the first time; their aedeagi are illustrated. *Haenydra terraevastatae* JÄCH, 1988 is here synonymized formally with *Hydraena khnzoriana* JANSENS, 1968.

Key words: Coleoptera, Hydraenidae, *Hydraena*, *Ochthebius*, *Limnebius*, faunistics, Armenia.

Introduction

The first specific treatment of the Armenian hydraenid fauna was published by JANSENS (1968a). It was based on 34 specimens collected by Stepan Mironovich Yablokov-Khnzorian (Степан Миронович Яблоков-Хнзорян) [October 17, 1904 – November 4, 1996]. A total of 12 identified plus three unidentified species was listed from Armenia in that article. Some of these identifications appeared doubtful, but, unfortunately, they could not be verified for many years, because the collection of S.M. Yablokov-Khnzorian was inaccessible to scientists outside the Soviet Union. Two new species, *Hydraena armeniaca* and *H. khnzoriana* were described by JANSENS (1968a), but unfortunately, the descriptions were based on slide-mounted aedeagi that had been crushed during preparation, which exacerbated their recognizability (see also JÄCH 1992: 85).

In 2001, my colleagues Helena V. Shaverdo and Harald Schillhammer had an opportunity to visit Armenia, where they were able to extensively collect water beetles in many parts of the country (see also SHAVERDO 2003), and to arrange the loan of Khnзорian's entire hydraenid collection. A few additional interesting specimens were collected in Armenia by Karl Hadulla (Troisdorf, Germany) in 2009.

In the present paper, the hydraenid fauna of Armenia is updated. A total of 39 species (two of which are still unidentified) is recorded from Armenia. Furthermore, based on the study of the Khnзорian collection, previous misidentifications by Janssens are corrected herein. In fact, 50 % of the species listed by JANSENS (1968a) were wrongly identified. The two new species described by JANSENS (1968a) are re-defined below and the aedeagi of *Hydraena armeniaca* and *Limnebius setifer* KHNZORIAN, 1962 are illustrated.

Material and methods

This study is based mainly on the specimens collected in Armenia by S.M. Yablokov-Khnzorian 1947–1978 (CKY), H.V. Shaverdo & H. Schillhammer 2001 (NMW) and by K. Hadulla 2009 (CHT). Except for the genus *Limnebius* LEACH, most of the CKY specimens were identified and published by JANSSENS (1968a). Unfortunately, the aedeagi of several specimens were damaged by Janssens or subsequently got lost. Two females, which were identified as “*Hymenodes* sp.” and “*Ochthebius* s.str. sp.” by JANSSENS (1968a: 117) could not be retrieved at all.

Abbreviations:

- CHT Coll. Hadulla, Troisdorf, Germany
 CKY Coll. Yablokov-Khnzorian, Yerevan, Armenia (currently curated by M. Kalashian, Yerevan)
 NMW Naturhistorisches Museum Wien, Austria

The administrative divisions of Armenia are shown in Fig. 1.

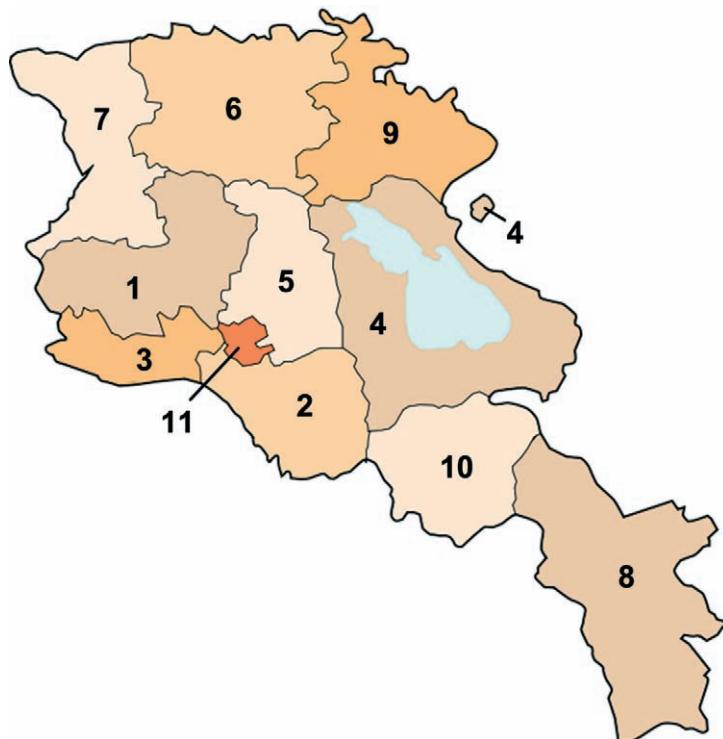


Fig. 1: Administrative divisions of Armenia (provincial capitals between brackets): 1) Aragatsotn (Ashtarak), 2) Ararat (Artashat), 3) Armavir (Armavir), 4) Gegharkunik (Gavar), 5) Kotayk (Hrazdan), 6) Lori (Vanadzor), 7) Shirak (Gyumri), 8) Syunik (Kapan), 9) Tavush (Ijevan), 10) Vayots Dzor (Yeghegnadzor), 11) Yerevan.

The names of the Armenian localities published by JANSSENS (1968a) are largely based on outdated transcription rules or on historical names. Their modern spelling and their provincial affiliation are shown in Table 1.

Table 1: Modern spelling and provincial affiliation of the locality names published by JANSSENS (1968a).

JANSSENS (1968a)	Modern Spelling	Province
“Alaberdi (Akhtala)”	Alaverdi, Akhtala	Tavush
“Alaberdi (Samlug)”	Alaverdi, Shamluk	Tavush
“Aparam”	Aparan Lake	Aragatsotn
“Dzermuk (Muradsar)”	Dzhermuk, Muradsar	Vayots Dzor
“Erevan (Agberan)”	Agveran	Kotayk
“Erevan (Aigrlidz/Airgliz)”	Aknalich (Aygrlich or Aygerlich)	Armavir
“Erevan (Gehart)”	Geghard	Kotayk
“Goris (Suranhi)”	Goris, Shurnukh	Syunik
“Goris (Surnuhi)”	Goris, Shurnukh	Syunik
“Idzevan”	Ijevan	Tavush
“Idzevan (Kiranc)”	Ijevan, Kirants	Tavush
“Kafan (Karmrakar)”	Kapan, Karmrakar	Syunik
“Kafan (Tanzaver)”	Kapan, Tantsaver	Syunik
“Kirovakan (Sagaly)”	Vahagnadzor	Lori
“Mikojan (Arpa)”	Yeghegnadzor, Arpa River	Vayots Dzor
“Samsadin (Berd)”	Shamshadin, Berd	Tavush
“Sevan (Cakkadzor)”	Sevan, Tsaghkadzor	Kotayk
“Stepanyan (Privol’noe)”	Stepanavan, Privolnoe	Lori

Sampling stations, leg. Shaverdo & Schillhammer 2001

A total of 87 sampling stations was examined. Only those stations, which yielded hydraenids, are listed below and mapped in Fig. 2.

Stn. 1: Geghard River including small rivulets, some of them springheads, substrate: gravel and rocks up to 30 cm Ø; geology: basalt; ca. 1200 m a.s.l.; near Garni, E Yerevan; 29.IV.2001.

Stn. 2: Small tributary to Stn. 1, partly stagnant, plenty of submerged vegetation and *Lemna*; substrate: clay, mud; 29.IV.2001.

Stn. 16: Geghard River, ca. 5 m wide, very fast flowing, large boulders (up to 3 m Ø), many rapids, very cold; ca. 1600 m a.s.l.; nr. Geghard, E Yerevan; 40°08.39'N 44°49.12'E; 5.V.2001.

Stn. 18: Stream, fast flowing, ca. 2–5 m wide, exceedingly cold (ca. 5°C), and some small accompanying rivulets with dense aquatic vegetation (including moss); geology: volcanic; ca. 2100 m a.s.l.; near Amberd, NW Byurakan, Aragats Mt., south slope; 40°24.34'N 44°13.65'E; 6.V.2001.

Stn. 20: Amberd River, ca. 5 m wide, with large boulders, ca. 1580 m a.s.l., some almost stagnant portions near riverbank, little to moderate vegetation, bottom with gravel and stones (5–50 cm Ø); above Byurakan (Orgov Gorge, between Antarut and Orgov villages), Mt. Aragats, south slope, 40°21.60'N 44°15.06'E; 6.V.2001.

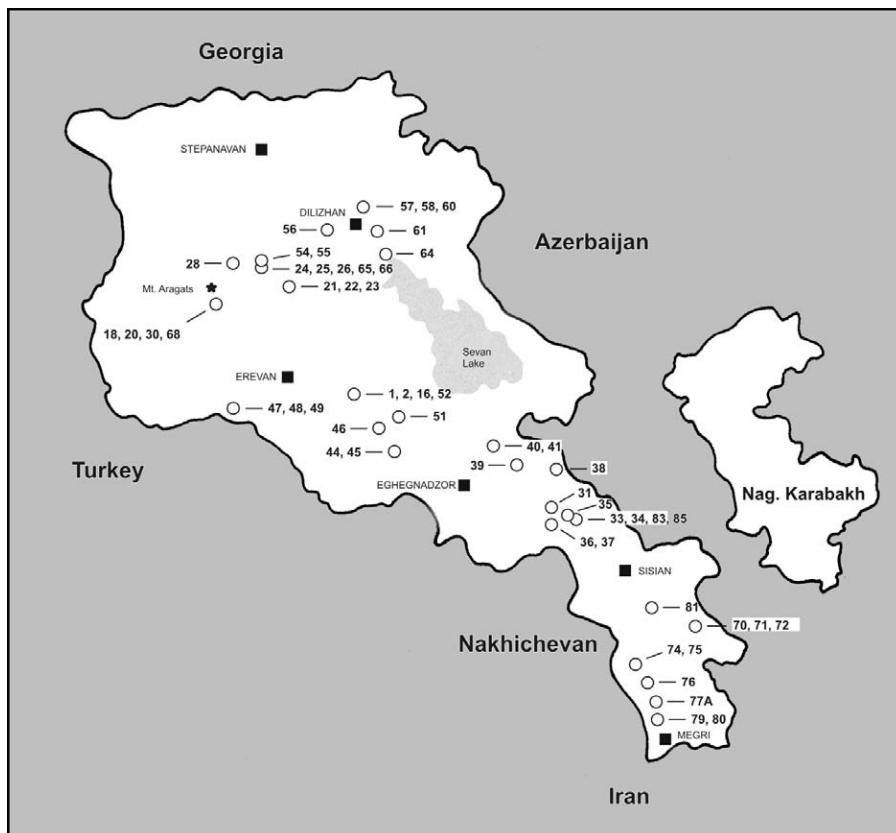


Fig. 2: Map of Armenia showing sampling stations, where Shaverdo & Schillhammer collected hydraenids in 2001.

Stn. 21: Forest stream (oak forest), ca. 3 m wide, sandy bottom; geology: granite; nr. Agveran resort, nr. Arzakan village, NW Charentsavan, N Yerevan; ca. 1850 m a.s.l.; 40°30.64'N 44°35.92'E; 7.V.2001.

Stn. 22: "Arzakan" River, fast flowing (through oak forest), ca. 3–5 m wide, subject to frequent floods; geology: volcanic and crystalline; ca. 1850 m a.s.l.; near Agveran Resort, near Arzakan, NW Charentsavan, N Yerevan; 40°30.10'N 44°34.97'E; 7.V.2001.

Stn. 23: Small stream ("Gold stream": Voske Getak), ca. 1 m wide; geology: granite and volcanic; ca. 1900 m a.s.l.; nr. Stn. 21; 40°30.04'N 44°36.86'E; 7.V.2001.

Stn. 24: Marmaryk River; geology: granite with volcanic and crystalline components; ca. 1970 m a.s.l.; below Ankavan village, 24 km NW Hrazdan, N Yerevan; 40°38.22'N 44°32.34'E; 9.V.2001.

Stn. 25: Shallow stagnant area and flooded grassland, ca. 10 cm deep; near Marmaryk River; geology: granite with volcanic and crystalline components; ca. 1970 m a.s.l.; below Ankavan, 24 km NW Hrazdan, N Yerevan; 40°38.22'N 44°32.34'E; 9.V.2001.

Stn. 26: Flooded area near Marmaryk River, mainly on grassland; ca. 1850 m a.s.l.; ca. 3 km below Stn. 25; 21 km NW Hrazdan; 40°37.72'N 44°33.20'E; 9.V.2001.

Stn. 30: Stn. 20; 10.V.2001.

- Stn. 33:** Vorotan River, ca. 10 m wide, moderately fast to fast flowing, furcation area; geology: volcanic; ca. 2050 m a.s.l.; east slope of pass above Sisian reservoir, 7 km E Bazarchay village, E Yeghegnadzor, SE Yerevan; 39°41.10'N 45°46.64'E; 12.V.2001.
- Stn. 34:** Stagnant waters, swamps, puddles along Vorotan River bank, with *Lemna*, decaying plant material; geology: volcanic; ca. 2050 m a.s.l.; east slope of pass, above Sisian reservoir, 7 km E Bazarchay, E Yeghegnadzor, SE Yerevan; 39°41.10'N 45°46.64'E; 12.V.2001.
- Stn. 35:** Small mountain stream, 0.5–2.0 m wide, quickly flowing (cascades), tussocks of *Carex* and moss, medium-sized rocks, stones, gravel (up to 1 m Ø); geology: volcanic; ca. 2100 m a.s.l.; Bazarchay village, west slope of pass, E Yeghegnadzor, SE Yerevan; 39°41.34'N 45°41.77'E; 12.V.2001.
- Stn. 36:** River, ca. 5–6 m wide, quickly flowing through riverine forest (*Juglans*, *Fraxinus*); geology: volcanic; ca. 1400 m a.s.l.; 5 km NE Artavan, E Yeghegnadzor, SE Yerevan; 39°40.00'N 45°34.00'E; 12.V.2001.
- Stn. 37:** Stn. 36; small muddy, boggy area, very shallow, dense reeds, plenty of decaying plant material.
- Stn. 38:** Arpa River, 15–20 m wide, stagnant water near river bank, flooded grass, bottom stony-sandy; ca. 2000 m a.s.l.; Dzhermuk, E Yeghegnadzor, SE Yerevan; 39°50.27'N 45°40.60'E; 12.V.2001.
- Stn. 39:** Stream flowing through alpine plain, 2–4 m wide, very shallow, gravel (up to 10 cm Ø), occasional stagnant water areas with flooded grass, otherwise no aquatic vegetation; geology: volcanic; ca. 2050 m a.s.l.; 2 km W Karmashen, E Yeghegnadzor, SE Yerevan; 39°49.71'N 45°30.88'E; 13.V.2001.
- Stn. 40:** Eghegis River, 3–6 m wide, large boulders, riffles and small rapids, bottom partly sandy, no aquatic vegetation, river bank with *Salix*; ca. 1850 m a.s.l.; near Gyadikvank, 3–4 km E Gyullidus, NE Yeghegnadzor, SE Yerevan; 39°53.29'N 45°28.97'E; 13.V.2001.
- Stn. 44:** Pond, 30 × 20 m, little aquatic vegetation, turtles; geology: limestone; ca. 1700 m a.s.l.; ca. 5 km W Lusashogh, NE Areni, SE Yerevan; 39°51.96'N 44°56.87'E; 14.V.2001.
- Stn. 45:** Pond, 40 × 30 m, muddy bottom, little aquatic vegetation, in places with decaying plant material of *Typha*; geology: limestone; ca. 1550 m a.s.l.; ca. 6 km W Lusashogh village, NE Areni, SE Yerevan; 39°51.64'N 44°55.97'E; 14.V.2001.
- Stn. 46:** Pond, 50 × 20 m, near Vedi River, plenty of *Typha*; ca. 1150 m a.s.l.; close to entrance of Khosrov Nature Reserve, ca. 15 km N Urtsadzor, NE Areni, SE Yerevan; 39°56.27'N 44°52.01'E; 14.V.2001.
- Stn. 47:** System of ponds connected by channels; bottom fine gravel; ca. 850 m a.s.l.; near Erasghaun, SW Echmiadzin, W Yerevan; 40°04.54'N 44°12.49'E; 15.V.2001.
- Stn. 48:** Very large pond, with small separated puddles; bottom clay; ca. 860 m a.s.l.; W Yerevan, S of Echmiadzin railway station; 40°03.36'N 44°14.96'E; 15.V.2001.
- Stn. 49:** Channel near Stn. 48; ca. 850 m a.s.l.; 40°03.63'N 44°15.75'E; 15.V.2001.
- Stn. 52:** Stn. 16, 18.V.2001.
- Stn. 54:** Forest stream, ca. 2–3 m wide, quickly flowing, shores with grass, partly undercut with exposed roots hanging into water, no aquatic vegetation, banks with *Betula* and *Salix*, adjacent slopes with *Quercus* and *Pinus*; substrate sandy to stony (up to 30 cm Ø); geology: crystalline; ca. 2050 m a.s.l.; above Ankavan, ca. 30 km NW Hrazdan, N Yerevan; 40°37.35'N 44°28.02'E; 19.V.2001.
- Stn. 55:** Stn. 54; small springhead puddles, bottom sandy-stony, thick layer of decaying leaves, grass, twigs and branches, banks with *Caltha*; 19.V.2001.

- Stn. 57:** Forest stream, 1–2 m wide, flowing through dense *Fagus* forest, riffles and small rapids, substrate sandy to stony (up to 30 cm Ø), lots of accumulated plant debris; ca. 1450 m a.s.l.; near Haghartsin monastery, NE Dilizhan; 40°48.05'N 44°53.31'E; 21.V.2001.
- Stn. 60:** Large puddle, caused by deep car tracks, probably long-lasting, shaded, filled with *Ranunculus*; ca. 1300 m a.s.l.; below Haghartsin monastery, NE Dilizhan; 40°47.99'N 44°54.35'E; 21.V.2001.
- Stn. 61:** Puddle in forest, same characteristics as Stn. 60; ca. 1330 m a.s.l.; Parzlich Lake, E Dilizhan; 40°45.19'N 44°57.72'E; 22.V.2001.
- Stn. 64:** Large swampy area and flooded meadow along channels, water shallow, bottom soil and decaying *Carex*; ca. 1940 m a.s.l.; near Tzovagyugh, ca. 10 km N Sevan; 40°36.48'N 44°57.29'E; 22.V.2001.
- Stn. 65:** Stn. 25; 27.V.2001.
- Stn. 66:** Stn. 26; 27.V.2001.
- Stn. 68:** Stn. 18; 28.V.2001.
- Stn. 70:** Water reservoir “Davidbeksoe” (ca. 1000 × 500 m), southwest shore, surrounded by *Fagus* forest, shore with plenty of low vegetation, bottom with decaying plant material, water rather warm; ca. 1400 m a.s.l.; near Arajadzor Nor, 25 km N Kapan; 30.V.2001.
- Stn. 71:** Stn. 70; Khashuni River, 4–8 m wide, flowing through the forest and into the reservoir; fast flowing, with some stagnant water areas; rocks (1.5 m Ø), gravel and sand, submerged stones covered by travertine; geology: mainly limestone; big rocks (Stn. 71A); 30.V.2001.
- Stn. 72:** Small forest puddles; nr. Stn. 70; 30.V.2001.
- Stn. 74:** Residual pools (ca. 4 × 1 m) in dry river bed (river course probably artificially changed), large stones (0.5–1.0 m Ø), bottom covered by decaying plant material, riverine forest (*Juglans*, *Liquidambar*, *Rosa*, *Salix*); ca. 1700 m a.s.l.; Darmanadzor (Aramazd) Gorge, between Kapan and Kadzharan; coordinates not recorded; 30.V.2001.
- Stn. 75:** Stn. 74; artificial stream bed, 0.5–1.0 m wide, shallow, bottom with sand, gravel, and soil washed in from the meadow, bank with grass partly hanging into the water; 30.V.2001.
- Stn. 76:** Puddles on the banks of Kadzharan River, between large granite rocks (Ø ca. 3 m), plenty of *Heracleum*, bottom of puddles covered by decaying plant material; ca. 2000 m a.s.l.; near “Old Kadzharan”, 3 km above Kadzharan; 31.V.2001.
- Stn. 79:** Stream, 0.2–0.5 m wide, flowing through *Quercus* forest, shaded, mostly flowing over flat rocks and forming small cataracts and waterfalls, level areas with moss-covered stones; ca. 2130 m a.s.l.; 16 km SW Kadzharan; coordinates not recorded; 31.V.2001.
- Stn. 80:** Puddle near large stream, flowing through *Quercus* forest; ca. 2130 m a.s.l.; 16 km SW Kadzharan; 31.V.2001.
- Stn. 81:** Stream, 1.5–4.5 m wide, stones (up to 20 cm Ø), often moss-covered, in places gravel, riverbank completely overgrown by *Heracleum*; ca. 1870 m a.s.l.; near Lernashen, SSE Sisian; 1.VI.2001.
- Stn. 83:** River, 2–10 m wide, stones (Ø up to 30 cm); ca. 2120 m a.s.l.; 20 km E Bazarchay; coordinates not recorded; 1.VI.2001.
- Stn. 85:** Stn. 34; deep water filled car tracks, algae; 1.VI.2001.

Results

Checklist of the Hydraenidae of Armenia

Species recorded from Armenia for the first time are marked with an asterisk (*).

1. *Hydraena abbasigili* JÄCH, 1988 *
2. *Hydraena anatolica* JANSENS, 1963 *
3. *Hydraena armeniaca* JANSENS, 1968
4. *Hydraena canakcioglu aydini* JANSENS, 1968 *
5. *Hydraena cappadocica* JÄCH, 1988 *
6. *Hydraena colchica* JANSENS, 1963
7. *Hydraena dentipalpis* REITTER, 1888 *
8. *Hydraena fontiscarsavii* (JÄCH, 1988) *
9. *Hydraena galatica* JANSENS, 1971 *
10. *Hydraena grandis* REITTER, 1885
11. *Hydraena integra* PRETNER, 1931 *
12. *Hydraena khnzoriani* JANSENS, 1968
13. *Hydraena paganettii* GANGLBAUER, 1901 *
14. *Hydraena parysatis* JANSENS, 1981 *
15. *Hydraena pontica* JANSENS, 1963
16. *Hydraena pygmaea* WATERHOUSE, 1833
17. *Hydraena tauricola* JÄCH, 1988 *
18. *Hydraena* sp. (*H. eichleri* complex)

19. *Limnebius levantinus* JÄCH, 1993 *
20. *Limnebius papposus* MULSANT, 1844 *
21. *Limnebius perparvulus* REY, 1884 *
22. *Limnebius rubropiceus* KUWERT, 1890
23. *Limnebius setifer* KHNZORIAN, 1962
24. *Limnebius stagnalis* GUILLEBEAU, 1890 *

25. *Ochthebius (Asiobates) adventicius* JÄCH, 1990 *
26. *Ochthebius (Asiobates) pliginskii* JÄCH, 1990 *
27. *Ochthebius (Asiobates) remotus* REITTER, 1885 *
28. *Ochthebius (Enicocerus) anatolicus* JANSENS, 1963 *
29. *Ochthebius (Enicocerus) colveranus* FERRO, 1979
30. *Ochthebius (Enicocerus) delyi* HEBAUER, 1990 *
31. *Ochthebius* (s.str.) *caucasicus* KUWERT, 1887
32. *Ochthebius* (s.str.) *difficilis* MULSANT, 1844
33. *Ochthebius* (s.str.) *fausti* SHARP, 1887 *
34. *Ochthebius* (s.str.) *lividipennis* PEYRON, 1858 *
35. *Ochthebius* (s.str.) *meridionalis* REY, 1885
36. *Ochthebius* (s.str.) *ragusae* KUWERT, 1887 *
37. *Ochthebius* (s.str.) *sulpuris* JÄCH, 1989 *
38. *Ochthebius* (s.str.) *viridis* PEYRON, 1858
39. *Ochthebius* (s.str.) sp. (*O. foveolatus* group)

Hydraena abbasigili JÄCH, 1988

Hydraena abbasigili JÄCH 1988b: 759.

MATERIAL EXAMINED:

NMW (leg. Shaverdo & Schillhammer 2001): 1 ex. Stn. 33; 13 exs. Stn. 35; 5 exs. Stn. 38; 4 exs. Stn. 39; 3 exs. Stn. 83.

TOTAL DISTRIBUTION: Turkey, Armenia (first record).

***Hydraena anatolica* JANSSENS, 1963**

Hydraena anatolica JANSSENS 1963: 146. – JANSSENS 1968a (under the name *H. gracilis* GERMAR).

MATERIAL EXAMINED:

CHT: 1 ♂, 1 ♀: Syunik Prov., 6 km N Lichk, 2020 m, 22.VIII.2009, leg. K. Hadulla; 2 ♀ ♀: Tavush Prov., S Diliyan, 1560 m, 26.VIII.2009, leg. K. Hadulla.

CKY: 2 ♀ ♀: Vayots Dzor Prov., Dzhermuk, Muradsar, 24.VII.1950. JANSSENS (1968a: 114) actually recorded these two females under the name *H. gracilis*, although *H. anatolica* was described by himself five years before.

1 ♀: Tavush Prov., Ijevan, Kirants, 24.V.1951. JANSSENS (1968a: 114) recorded this female under “*Hydraena (Haenya) sp.*”. Based on its pygidial sclerites it can be identified as *H. anatolica* although its elytral apices are lacking.

NMW (leg. Shaverdo & Schillhammer 2001): 33 exs. Stn. 21; 1 ex. Stn. 22; 3 exs. Stn. 23; 2 exs. Stn. 24; 7 exs. Stn. 33; 7 exs. Stn. 35; 10 exs. Stn. 36; 2 ♀ ♀ Stn. 37; 2 exs. Stn. 39; 25 exs. Stn. 54; 8 exs. Stn. 57; 2 exs. Stn. 71; 5 ex. Stn. 74; 1 exs. Stn. 79; 5 exs. Stn. 81; 2 exs. Stn. 83.

TOTAL DISTRIBUTION: Turkey, Armenia (first record), Azerbaijan, Iran.

***Hydraena armeniaca* JANSSENS, 1968**

Hydraena armeniaca JANSSENS 1968a: 111. – JÄCH 1992 (misidentified); ERTORUN et al. 2011.

TYPE LOCALITY: Geghard, E Yerevan, Kotayk Province, central Armenia.

MATERIAL EXAMINED:

CKY: Holotype ♂: “Yerevan Geghard ASSR · 15 · 8 · 48” [in Cyrillic], “Prép. Micr N°6729.9”, “Microprep. relaxed Jäch 2001” [handwritten], “TYPE”, “E. Janssens det., 195[cut off] *Hydraena* s.str. *armeniaca* n.sp.” [partly handwritten]. The aedeagus of the holotype has been crunched under a cover glass (see original description by JANSSENS 1981: Fig. 2). We have relaxed the aedeagus and glued it to the card together with the beetle.

1 ♂, 2 ♀ ♀: Vayots Dzor Prov., Dzhermuk, Arpa, 23.VII.1950. These three specimens were not listed in JANSSENS (1968a).

NMW (leg. Shaverdo & Schillhammer 2001): 1 ♀ Stn. 68.

ADDITIONAL MATERIAL EXAMINED:

3 ♂ ♂, 1 teneral ♀ (NMW): Turkey, Rize, 10 km N Ikizdere, 1.IX.2001, leg. A. Kasapoğlu; 1 ♂ (Coll. Kasapoğlu): Turkey, Erzurum, 10 km N Uzunkavak Köyü, 20.IX.2000, leg. A. Kasapoğlu.

NOTE: For gonocoxite, female tergite X and aedeagus see Figs. 3–6.

TOTAL DISTRIBUTION: Turkey (first record), Armenia.

***Hydraena canakcioglu aydini* JANSSENS, 1968**

Hydraena canakcioglu aydini JANSSENS 1968b: 67.

MATERIAL EXAMINED:

NMW (leg. Shaverdo & Schillhammer 2001): 1 ex. Stn. 21; 2 exs. Stn. 33; 2 exs. Stn. 35; 8 exs. Stn. 54.

TOTAL DISTRIBUTION: Turkey, Armenia (first record), Russia.

***Hydraena cappadocica* JÄCH, 1988**

Hydraena cappadocica JÄCH 1988a: 242.

MATERIAL EXAMINED:

NMW (leg. Shaverdo & Schillhammer 2001): 1 ♂ Stn. 71.

TOTAL DISTRIBUTION: Turkey, Armenia (first record).

Hydraena colchica* JANSSENS, 1963Hydraena colchica* JANSSENS 1963: 16. – JANSSENS 1968a.

MATERIAL EXAMINED:

CKY: 1 ♂: Lori Prov., Stepanavan, Privolnoe, 9.VII.1954; 2 ♂♂: Tavush Prov., Ijevan, 24.V.1951. Unfortunately, all three aedeagi have been slide mounted and severely damaged by Janssens. We have relaxed the aedeagi and glued them to the card together with the beetles. Following comparison with Turkish specimens it seems likely, that the Armenian material really represents *H. colchica*. However, confirmation must wait until fresh material from Armenia becomes available.

[In addition to these three males, JANSSENS (1968a) listed two females from two localities under *H. colchica*: 1 ♀: Aragatsotn Prov., Aparan Lake, 31.V.1949; 1 teneral ♀: Kotayk Prov., Geghard, 15.VIII.1948. Following examination of the pygidial sclerites, the specimen from Aparan Lake belongs to *H. galatica*, while the second specimen very well agrees with the females of *H. parysatis* collected by Shaverdo & Schillhammer 2001].

TOTAL DISTRIBUTION: NE Turkey, Armenia.

Hydraena dentipalpis* REITTER, 1888Hydraena dentipalpis* REITTER 1888: 143.

MATERIAL EXAMINED:

NMW (leg. Shaverdo & Schillhammer 2001): 1 ♀ Stn. 39; 6 exs. Stn. 60; 5 exs. Stn. 61.

TOTAL DISTRIBUTION: Russia, Turkey, Armenia (first record), Azerbaijan.

Hydraena fontiscarsavii* (JÄCH, 1988)Haenydra fontiscarsavii* JÄCH 1988b: 769.

MATERIAL EXAMINED:

CHT: 1 ♂: Syunik Prov., 6 km N Lichk, 2020 m, 22.VIII.2009, leg. K. Hadulla.

NMW (leg. Shaverdo & Schillhammer 2001): 12 exs. Stn. 16; 2 exs. Stn. 21; 1 exs. Stn. 23; 2 exs. Stn. 26; 1 ex. Stn. 30; 4 exs. Stn. 52; 2 ♀♀ Stn. 54; 6 exs. Stn. 79; 2 exs. Stn. 81.

TOTAL DISTRIBUTION: Turkey, Armenia (first record), Iran.

Hydraena galatica* JANSSENS, 1971Hydraena galatica* JANSSENS 1971: 320.

MATERIAL EXAMINED:

CKY: 1 ♀: Aragatsotn Prov., Aparan Lake, 31.V.1949. This specimen was wrongly identified by JANSSENS (1968a) as *H. colchica*.

NMW (leg. Shaverdo & Schillhammer 2001): 9 exs. Stn. 35; 41 exs. Stn. 39; 1 ♀ Stn. 83.

TOTAL DISTRIBUTION: Turkey, Armenia (first record).

Hydraena grandis* REITTER, 1885Hydraena grandis* REITTER 1885: 360. – JANSSENS 1968a.

MATERIAL EXAMINED:

CKY: 1 ♂: Tavush Prov., Shamshadin, Berd, 7.VI.1949; 1 ♀: Tavush Prov., Ijevan, 24.V.1951. This female is comparatively small, but its pygidial sclerites perfectly agree with females from Azerbaijan.

[1 ♀: Kotayk Prov., Sevan, Tsaghkadzor, 11.VIII.1951. This female was wrongly identified as *H. grandis* by JANSSENS (1968a). In fact it belongs to *H. pontica*.]

NMW (leg. Shaverdo & Schillhammer 2001): 1 ♂ Stn. 40.

TOTAL DISTRIBUTION: Southeastern Europe, Turkey, Armenia, Azerbaijan, Iran. The first Armenian record (JANSSENS 1968a) has been overlooked by HANSEN (1998) and JÄCH (2004).

Hydraena integra PRETNER, 1931

Hydraena integra PRETNER 1931: 110.

MATERIAL EXAMINED:

CKY: 2 ♀ ♀: Lori Prov., Vahagnadzor, 2.VI.1949. One of these females was designated by JANSSENS (1968a) as paratype of *H. khnzoriani*.

NMW (leg. Shaverdo & Schillhammer 2001): 5 ♂♂, 1 ♀ Stn. 54.

TOTAL DISTRIBUTION: Turkey, Georgia, Armenia (first record).

Hydraena khnzoriani JANSSENS, 1968

Hydraena (Haenydra) khnzoriani JANSSENS 1968a: 114.

Haenydra terraevastatae JÄCH 1988b: 768. **syn.n.**

SYNONYMY: Although the aedeagus of the holotype of *H. khnzoriani* is mutilated (see JANSSENS 1968a: Fig. 3), there is no doubt, that *H. khnzoriani* is identical with the species described 20 years later under the name *H. terraevastatae*. The synonymy of *Hydraena khnzoriani* and *H. terraevastatae* was already listed by JÄCH (2004). However, it is here formally established.

TYPE LOCALITY: Vahagnadzor, Lori Province, northern Armenia.

MATERIAL EXAMINED:

CHT: 1 ♂, 1 ♀: Syunik Prov., 6 km N Lichk, 2020 m, 22.VIII.2009, leg. K. Hadulla.

CKY: **Holotype** ♂: “Kirovakan [Vanadzor] Sagaly [Vahagnadzor] ASSR.2.6.49” [in Cyrillic], “Prép. Micr N°6729.7”, “microprep. relaxed Jäch 2001” [handwritten], “TYPE”, “E. Janssens det., 195 Haenydra khnzoriani n.sp.” [partly handwritten].

[**Paratype** ♀, plus 1 teneral ♀: same collecting data as holotype. Actually, only one paratype was mentioned by JANSSENS (1968a). Thus the second female cannot be regarded as paratype, although its label data exactly agree with the types. The pygidial sclerites of the paratype are lacking, however, based on its elytral apex it very probably belongs to *H. integra*. The teneral female however can be identified safely as *H. integra* based on its tergite X].

1 ♀: Kotayk Prov., Sevan, Tsaghkadzor, 11.VIII.1951. This female was not included in JANSSENS (1968a).

NMW (leg. Shaverdo & Schillhammer 2001): 4 exs. Stn. 21; 3 ♀ ♀ Stn. 35; 1 exs. Stn. 52; 6 ex. Stn. 54; 2 exs. Stn. 57; 10 exs. Stn. 79; 3 exs. Stn. 81.

TOTAL DISTRIBUTION: Turkey, Armenia, Iran.

Hydraena paganettii GANGLBAUER, 1901

Hydraena paganettii GANGLBAUER 1901: 322.

MATERIAL EXAMINED:

NMW (leg. Shaverdo & Schillhammer 2001): 1 ex. Stn. 61.

TOTAL DISTRIBUTION: Eastern Central Europe to Turkey, Armenia (first record), Azerbaijan and Israel.

Hydraena parysatis JANSSENS, 1981

Hydraena parysatis JANSSENS 1981: 334. – SKALE & JÄCH 2011 (aedeagus illustration).

MATERIAL EXAMINED:

CKY: 1 ♀: Kotayk Prov., Geghard, 15.VIII.1948. This specimen was identified as *H. colchica* by JANSSENS (1968a: 111). However, following examination of the gonoxocite and tergite X (Figs. 7–8), this female very well agrees with the females of *H. parysatis* collected by Shaverdo & Schillhammer 2001 (see below).

NMW (leg. Shaverdo & Schillhammer 2001): 3 ♂♂, 2 ♀♀ Stn. 74; 1 ♀ Stn. 75; 2 ♀♀ Stn. 81. These specimens are very probably identical with *H. parysatis* (see SKALE & JÄCH 2011 for taxonomic details).

TOTAL DISTRIBUTION: Armenia (first record), Iran.

***Hydraena pontica* JANSSENS, 1963**

Hydraena pontica JANSSENS 1963: 14. – JANSSENS 1968a (treated as a synonym of *H. riparia* KUGELANN).

MATERIAL EXAMINED:

CHT: 7 exs.: Syunik Prov., 6 km N Lichk, 2020 m, 22.VIII.2009, leg. K. Hadulla; 6 exs. (CHT): Tavush Prov., S Dilijan, 1560 m, 26.VIII.2009, leg. K. Hadulla.

CKY: 1 ♂: Tavush Prov., Alaverdi, Shamluk, 20.VIII.1953; 3 exs.: Tavush Prov., Alaverdi, Akhtala, 6.VI.1949; 3 exs.: Kotayk Prov., Sevan, Tsaghkadzor, 11.VIII.1951; 3 exs.: Syunik Prov., Kapan, Karmrakar, 17.VI.1952; 1 ♂: Syunik Prov., Goris, Shurnukh, 3.VIII.1952; 15 exs.: Kotayk Prov., Agveran, 10.VIII.1978.

NMW (leg. Shaverdo & Schillhammer 2001): 2 exs. Stn. 18; 1 ex. Stn. 20; 4 exs. Stn. 21; 2 exs. Stn. 22; 2 exs. Stn. 26; 1 ex. Stn. 35; 1 ex. Stn. 54; 3 exs. Stn. 55; 2 exs. Stn. 57; 7 exs. Stn. 60; 4 exs. Stn. 65; 2 exs. Stn. 70; 6 exs. Stn. 71; 6 exs. Stn. 71A; 5 exs. Stn. 72; 4 exs. Stn. 74; 7 exs. Stn. 75; 2 exs. Stn. 79; 1 ex. Stn. 80; 6 exs. Stn. 81.

TOTAL DISTRIBUTION: Turkey, Georgia, Armenia, Azerbaijan.

***Hydraena pygmaea* WATERHOUSE, 1833**

Hydraena pygmaea WATERHOUSE 1833: 295. – JANSSENS 1968a.

MATERIAL EXAMINED:

CHT: 1 ♀: Tavush Prov., S Dilijan, 1560 m, 26.VIII.2009, leg. K. Hadulla.

CKY: 1 ♂: Kotayk Prov., Geghard, 15.VIII.1948.

NMW (leg. Shaverdo & Schillhammer 2001): 2 exs. Stn. 16; 1 ex. Stn. 23; 1 ex. Stn. 54.

TOTAL DISTRIBUTION: Great Britain to Armenia and Turkey.

***Hydraena tauricola* JÄCH, 1988**

Hydraena tauricola JÄCH 1988a: 244.

MATERIAL EXAMINED:

NMW (leg. Shaverdo & Schillhammer 2001): 2 exs. Stn. 36.

TOTAL DISTRIBUTION: Turkey, Armenia (frst record), Iran.

***Hydraena* sp.**

MATERIAL EXAMINED:

CHT/NMW: 1 ♀: Vayots Dzor Prov., Noravank Monastery, 6.6 km SE Areni, 1155 m, 24./25.VIII.2009, leg. K. Hadulla. This female certainly represents a member of the *Hydraena eichleri* complex. Unfortunately, the abdomen is missing and therefore this specimen cannot be identified with certainty. *Hydraena eichleri* ORCHYMONT, 1937 is known from Turkey, Georgia, Azerbaijan, and it is thus the most wide-spread species of this complex.

***Limnebius levantinus* JÄCH, 1993**

Limnebius levantinus JÄCH 1993: 131.

CKY: 1 ♂: Yerevan Prov., Nubarashen (“Sovetashen”), 1.VII.1951.

TOTAL DISTRIBUTION: Turkey, Armenia (first record), Iran, Syria, Lebanon, Israel.

Limnebius papposus* MULSANT, 1844Limnebius papposus* MULSANT 1844b: 92.

MATERIAL EXAMINED:

CKY: 1 ♂: Gegarkunik Prov., Sevan, Shorzha, 12.VI.1949.NMW (leg. Shaverdo & Schillhammer 2001): 5 ♀ Stn. 44; 24 exs. Stn. 64.

TOTAL DISTRIBUTION: Europe, Turkey, Armenia (first record).

Limnebius perparvulus* REY, 1884Limnebius perparvulus* REY 1884: 268.

MATERIAL EXAMINED:

NMW (leg. Shaverdo & Schillhammer 2001): 6 exs. Stn. 46.

TOTAL DISTRIBUTION: Mediterranean, Armenia (first record), Iran.

Limnebius rubropiceus* KUWERT, 1890Limnebius rubropiceus* KUWERT 1890: 99.

MATERIAL EXAMINED:

NMW (leg. Shaverdo & Schillhammer 2001): 1 ♀ Stn. 83; 1 ♀ Stn. 85.

TOTAL DISTRIBUTION: Macedonia, Greece, Turkey, Armenia.

Limnebius setifer* KHNZORIAN, 1962Limnebius setifer* KHNZORIAN 1962: 102. – ERTORUN et al. 2011.Remarkably, this species was not mentioned by JANSSENS (1968a) and it was thus also lacking in the revision of the Palearctic species of *Limnebius* by JÄCH (1993).

TYPE LOCALITY: Margin of Arpa River, near Yeghegnadzor, Vayots Dzor Province, central Armenia.

MATERIAL EXAMINED:

CKY: **Lectotype** ♂ (by present designation): “Мцкоян [Yeghegnadzor] Арпа [Arpa River] ACCP 20.7.[19]50” [handwritten], “Holotype *Limnebius setifer* KHNZ.” [handwritten]. **Paralectotype** ♀: “Мцкоян [Yeghegnadzor] Арпа [Arpa River] ACCP-20-7-50” [handwritten], “Paratype *Limnebius setifer* KHNZ.” [handwritten]. The holotype is undissected.

1 ♂: Yeghegnadzor, Arpa River, 20.VII.1950. In the original description (KHNZORIAN 1962) only two specimens (♂, ♀) were mentioned. Therefore, this male cannot be regarded as a syntype, although its label data are identical with those of the paralectotype.

ADDITIONAL MATERIAL EXAMINED:

2 ♂♂ (NMW): Turkey, Erzurum, 8 km N Tekman, 7.IX.2001, leg. A. Kasapoğlu; 1 ♂ (Coll. Kasapoğlu): Turkey, Erzurum, 20 km S Pazaryolu, Çoruh River, Leylek Village, 13.IX.2001, leg. A. Kasapoğlu.

DIAGNOSIS: Female: 2.2 mm, male: 2.4–2.6 mm long. *Limnebius setifer* is closely related with *L. claviger*. These two species are the only known members of the *L. claviger* group (sensu JÄCH 1993). Morphologically, they agree very well, incl. the male ventrite VI (with a large median glabrous area and submedian asymmetrical longitudinal ridges) and the strongly curved mesotibia (less distinctly curved in female). In the habitus illustration published by KHNZORIAN (1962: Fig. 3) the mesotibia is erroneously figured straight.

The aedeagus (Fig. 9) is here illustrated for the first time. It differs slightly from the aedeagus of *L. claviger* (see JÄCH 1993: Fig. 58) in the apical part of the main piece, which is distinctly wider.

HABITAT: The single male from Çoruh River was collected among rocks at the river margin.

TOTAL DISTRIBUTION: Turkey (first record), Armenia.

Limnebius stagnalis* GUILLEBEAU, 1890Limnebius stagnalis* GUILLEBEAU 1890: 33.

MATERIAL EXAMINED:

CKY: 2 ♂♂: Syunik Prov., Kapan, Tantsaver, 11.VIII.1952, 13.VIII.1952.NMW (leg. Shaverdo & Schillhammer 2001): 1 ♀ Stn. 24; 5 exs. Stn. 25; 15 exs. Stn. 26; 3 exs. Stn. 44; 8 exs. Stn. 60; 5 exs. Stn. 61; 1 ex. Stn. 65; 3 exs. Stn. 66; 6 exs. Stn. 70; 2 ♀♀ Stn. 74; 1 ♀ Stn. 85.

TOTAL DISTRIBUTION: Southeastern Central Europe to Turkey, Armenia (first record).

Ochthebius (Asiobates) adventicius* JÄCH, 1990Ochthebius (Asiobates) adventicius* JÄCH 1990: 41.

MATERIAL EXAMINED:

NMW (leg. Shaverdo & Schillhammer 2001): 23 exs. Stn. 60; 73 exs. Stn. 61.

TOTAL DISTRIBUTION: Georgia, Armenia (first record), Azerbaijan, Iran.

Ochthebius (Asiobates) pliginskii* JÄCH, 1990Ochthebius (Asiobates) pliginskii* JÄCH 1990: 47.

MATERIAL EXAMINED:

NMW (leg. Shaverdo & Schillhammer 2001): 3 exs. Stn. 61.

TOTAL DISTRIBUTION: Ukraine, Russia, Armenia (first record), Turkey.

Ochthebius (Asiobates) remotus* REITTER, 1885Ochthebius remotus* REITTER 1885: 361.

MATERIAL EXAMINED:

CKY: 1 ♂: Gegharkunik Prov., Martuny, Yanykh, 15.VII.1950. This specimen was not listed in JANSSENS (1968a). The abdomen had previously been dissected and the aedeagus was heavily damaged. Fortunately, the distal lobe is still recognizable.

TOTAL DISTRIBUTION: Latvia, Russia, Armenia (first record), Turkey. This species has been described from the "Caucasus", without any geographical details.

Ochthebius (Enicocerus) anatolicus* JANSSENS, 1963Ochthebius (Enicocerus) anatolicus* JANSSENS 1963: 25.

MATERIAL EXAMINED:

NMW (leg. Shaverdo & Schillhammer 2001): 1 ♂ Stn. 54.

TOTAL DISTRIBUTION: Turkey, Georgia, Armenia (first record).

Ochthebius (Enicocerus) colveranus* FERRO, 1979Ochthebius (Enicocerus) colveranus* FERRO 1979: 113. – JANSSENS 1968a (under the name *O. exsculptus* GERMAR).*Ochthebius (Enicocerus) ineditus* FERRO 1982: 275.

MATERIAL EXAMINED:

CKY: 1 ♂, 1 ♀: Tavush Prov., Shamshadin, Berd, 7.VI.1949; 1 ♂: Syunik Prov., Kapan, Tantsaver, 11.VIII.1952.NMW (leg. Shaverdo & Schillhammer 2001): 1 ♀ Stn. 16; 1 ♂ Stn. 30.

TOTAL DISTRIBUTION: Central Europe to Turkey, Georgia, Armenia.

TAXONOMIC NOTE: *Ochthebius colveranus* probably forms a complex of species, which is currently under revision (Jäch & Delgado, in prep.). Maybe *O. ineditus* FERRO, 1982, described from Crimea (Ukraine), turns out to be a discrete species.

***Ochthebius (Enicocerus) delyi* HEBAUER, 1990**

Ochthebius (Enicocerus) delyi HEBAUER 1990: 27.

MATERIAL EXAMINED:

NMW (leg. Shaverdo & Schillhammer 2001): 1 ♀ Stn. 24; 1 ♂, 2 ♀ ♀ Stn. 38; 1 ♀ Stn. 54.

TOTAL DISTRIBUTION: Turkey, Armenia (first record), Iran.

TAXONOMIC NOTE: This species was described from the “Caucasus” without any geographical details. Populations from Turkey and Iran might represent discrete undescribed species. More material needs to be examined.

***Ochthebius (s.str.) caucasicus* KUWERT, 1887**

Ochthebius (s.str.) caucasicus KUWERT 1887: 389.

MATERIAL EXAMINED:

CKY: 7 exs.: Yerevan Prov., Nubarashen (“Sovetashen”), 1.VII.1951, 24.V.1952. These specimens were not included in JANSSENS (1968a).

NMW (leg. Shaverdo & Schillhammer 2001): 6 exs. Stn. 1; 11 exs. Stn. 2; 1 ex. Stn. 47.

TOTAL DISTRIBUTION: Georgia, Armenia, Turkey, Iran to Mongolia and Nepal.

***Ochthebius (s.str.) difficilis* MULSANT, 1844**

Ochthebius (s.str.) difficilis MULSANT 1844a: 375. – JANSSENS 1968a (under the name *O. schneideri* KUWERT).

MATERIAL EXAMINED:

CKY: 1 ♀: Tavush Prov., Shamshadin, Berd, 7.VI.1949.

NMW (leg. Shaverdo & Schillhammer 2001): 3 exs. Stn. 1; 1 ex. Stn. 2.

TOTAL DISTRIBUTION: Mediterranean, Georgia, Armenia, Iran.

***Ochthebius (s.str.) fausti* SHARP, 1887**

Ochthebius (s.str.) fausti SHARP 1887: 171.

MATERIAL EXAMINED:

NMW (leg. Shaverdo & Schillhammer 2001): 1 ♂ Stn. 48.

TOTAL DISTRIBUTION: Southeast Europe, southern Russia, Turkey, Armenia (first record), Iran, Turkmenistan.

***Ochthebius (s.str.) lividipennis* PEYRON, 1858**

Ochthebius (s.str.) lividipennis PEYRON 1858: 405.

MATERIAL EXAMINED:

CKY: 4 exs.: Armavir Prov., Aknalich (“Aygerlich”), 6.VII.1950. These specimens were not included in JANSSENS (1968a).

NMW (leg. Shaverdo & Schillhammer 2001): 1 ex. Stn. 44; 1 ex. Stn. 45; 22 exs. Stn. 47; 15 exs. Stn. 48; 7 exs. Stn. 49.

TOTAL DISTRIBUTION: Eastern Central Europe, East Mediterranean, Armenia (first record), Azerbaijan, Iran.

***Ochthebius (s.str.) meridionalis* REY, 1885**

Ochthebius (s.str.) meridionalis REY 1885: 21. – JANSSENS 1968a.

MATERIAL EXAMINED:

CKY: 11 exs.: Armavir Prov., Aknalich (“Aygerlich”), 6.VII.1950, 6.VII.1954. Only one of these specimens was listed in JANSSENS (1968a).

1 ♂: Kotayk Prov., Goght, 10.VII.1949; 1 ♀: Yerevan Prov., Arabkir, 27.III.1952. These two specimens were not included in JANSSENS (1968a).

NMW (leg. Shaverdo & Schillhammer 2001): 3 exs. Stn. 47.

TOTAL DISTRIBUTION: Southern Central Europe, Mediterranean, Turkey, Armenia, Azerbaijan, Iraq, Iran, Turkmenistan.

***Ochthebius (s.str.) ragusae* KUWERT, 1887**

Ochthebius (s.str.) ragusae KUWERT 1887: 398.

MATERIAL EXAMINED:

CKY: 1 ♂: Syunik Prov., Kapan, Tantsaver, 11.VIII.1952. This specimen was not included in JANSSENS (1968a).

NMW (leg. Shaverdo & Schillhammer 2001): 2 exs. Stn. 39; 2 exs. Stn. 45; 4 exs. Stn. 76.

TOTAL DISTRIBUTION: Southern Europe, Turkey, Georgia, Armenia (first record), Azerbaijan, Saudi Arabia, Sinai, Iran, Central Asia.

***Ochthebius (s.str.) sulpuris* JÄCH, 1989**

Ochthebius (s.str.) sulpuris JÄCH 1989: 113.

MATERIAL EXAMINED:

NMW (leg. Shaverdo & Schillhammer 2001): 7 exs. Stn. 38.

TOTAL DISTRIBUTION: Northeastern Turkey, Armenia (first record).

***Ochthebius (s.str.) viridis viridis* PEYRON, 1858**

Ochthebius (s.str.) viridis viridis PEYRON 1858: 404. – JANSSENS 1968a (under the name *O. peisonis* GANGLBAUER); JÄCH 2004 (first record from Armenia, based on the female of the CKY, see below).

MATERIAL EXAMINED:

CKY: 1 ♀: Armavir Prov., Aknalich (“Aygerlich”), 19.V.1952. This female agrees very well with females of *O. viridis viridis* from Lake Van in eastern Turkey.

TOTAL DISTRIBUTION: England, northern France to northern Germany, southern Scandinavia, northern Italy, Balkan Peninsula, Turkey, Armenia, Lebanon, Kazakhstan and Tadzhikistan.

***Ochthebius (s.str.)* sp.**

Ochthebius (s.str.) pedicularius KUWERT, 1887: JANSSENS 1968a: 115.

MATERIAL EXAMINED:

CKY: 2 ♂♂, 1 ♀: Vayots Dzor Prov., Yeghegnadzor, Arpa River, 20.VII.1950; 1 ♂: Tavush Prov., Shamshadin, Berd, 25.VI.1953; 1 ♀: Syunik Prov., Goris, Shurnukh, 6.VIII.1952. All males were genitalized by Janssens, but the microprepares are untraceable. Therefore these five specimens cannot be identified. According to external characters, they all could belong to a single species, which is definitely a member of the

Ochthebius foveolatus group. JANSSENS (1968a) listed them under *O. pedicularius*, which is a rare European species. Both female specimens have strongly explanate elytral gutters but lack the typical emargination of the ventrite 6 of *O. foveolatus*. They possibly belong to *O. elburzi* FERRO, 1987, *O. magnannulatus* JÄCH & DELGADO, 2009, *O. parvannulatus*, JÄCH & DELGADO, 2009, *O. speculator* JÄCH, 1991, or to an undescribed species.

Discussion

A total of 39 species is here recorded from Armenia. However, two of these species could not yet be identified with certainty. Numerous additional species recorded from neighbouring areas can be expected to occur also in Armenia. For instance, *Hydraena planata* KIESENWETTER, 1849 was already listed for Armenia by JÄCH (2004), because, according to the original description, the types were collected in “Armenien” [historically: Armenia, Georgia or northeastern Turkey]. However, following a faunistic-taxonomic revision of the *H. planata* complex, this species has so far been confirmed only for Georgia and northwestern Azerbaijan (see JÄCH & DÍAZ 2006: Fig. 11). But it can be assumed that *H. planata* indeed occurs in modern Armenia as well. *Ochthebius (Asiobates) kiesenwetteri* KUWERT, 1887 was described from the “Caucasus” and has never been found again. Its true type locality could well be in Armenia. The following species are more or less wide-spread in the Caucasus Region or have been collected near the border of Armenia and therefore can be expected to occur also in Armenia: *Hydraena helena* ORCHYMONT, 1929, *H. richardimbi* JÄCH, 1992, *H. schoenmanni* JÄCH, 1988, *H. virginalis* JANSSENS, 1963, *Ochthebius elisae* SAHLBERG, 1900, *O. inconspicuus* JÄCH, 1991, *O. inelegans* JÄCH, 2002, *O. puberulus* REITTER, 1885, *O. schneideri* KUWERT, 1887, *O. subopacus* REITTER, 1885, *O. uskubensis* HEBAUER, 1986, *O. virens* JÄCH, 1992.

The most common Armenian hydraenids seem to be *Hydraena pontica* and *H. anatolica*, which were collected by Shaverdo & Schillhammer from 18 resp. 15 localities.

Twenty-four species are here newly recorded from Armenia, which is 62 % of the total number of named species known from Armenia.

The hydraenids of Armenia can be regarded as comparatively well explored, although large parts in the north (toward the border of Georgia) have not been thoroughly sampled so far. No hydraenids have been recorded from the disputed Nagorno-Karabakh Republic.

Shaverdo & Schillhammer collected a total of 32 species. Only seven species of the Armenian checklist, namely *H. colchica*, *H. sp. (eichleri group)*, *Limnebius levantinus*, *L. setifer*, *Ochthebius remotus*, *O. viridis*, and *O. sp. (foveolatus group)*, were not collected by them in 2001. Their most productive collecting station was Stn. 54/55, where they found nine hydraenid species, which is almost exactly one fourth of all named species recorded from Armenia.

The following species were erroneously recorded from Armenia by JANSSENS (1968a):

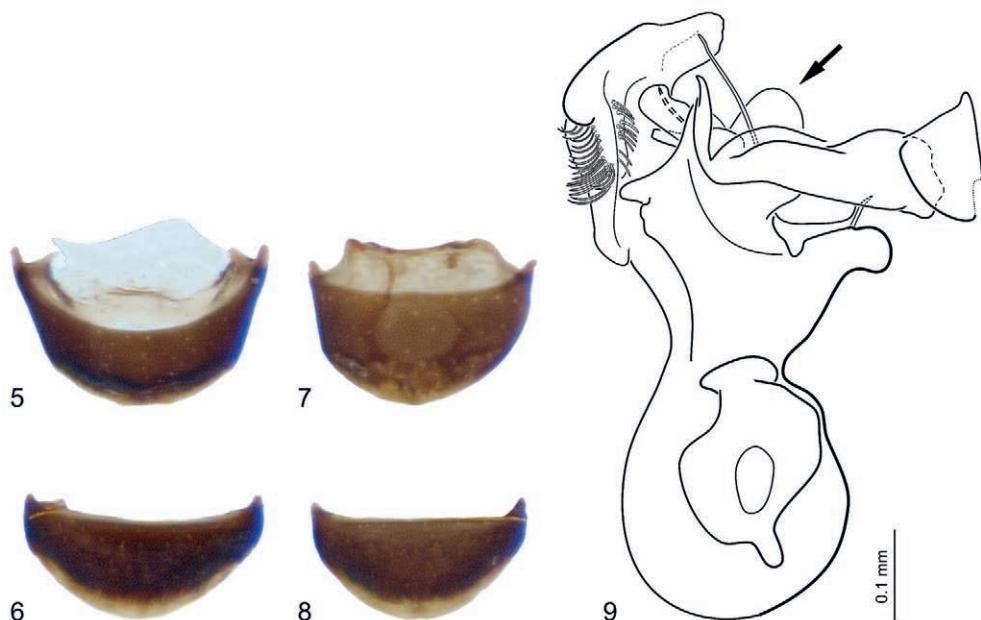
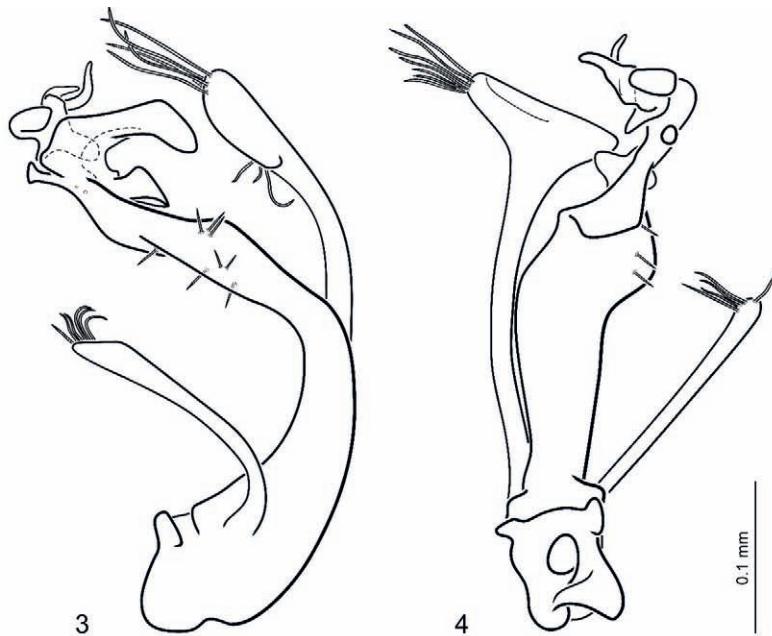
“ <i>Hydraena (Haenydra) gracilis</i> ”	[= <i>H. (s.str.) anatolica</i>]
“ <i>Hydraena (s.str.) riparia</i> ”	[= <i>H. (s.str.) pontica</i>]
“ <i>Ochthebius (Enicocerus) exsculptus</i> ”	[= <i>O. (Enicocerus) colveranus</i> species complex]
“ <i>Ochthebius (Hymenodes) pedicularius</i> ”	[= <i>O. sp. (<i>O. foveolatus</i> species group)</i>]
“ <i>Ochthebius (Hymenodes) schneideri</i> ”	[= <i>O. (s.str.) difficilis</i>]
“ <i>Ochthebius (s.str.) peisonis</i> ”	[= <i>O. (s.str.) viridis</i>]

Acknowledgements

It has been exactly 10 years ago that Helena V. Shaverdo and Harald Schillhammer travelled to Armenia, where they collected thousands of water beetles. While the adephagous water beetles were identified and published within two years (see SHAVERDO 2003), it took exactly one decade to finish the manuscript on the Hydraenidae. We are grateful to Helena V. Shaverdo and Harald Schillhammer for their patience, and especially to Mark Kalashian for the long-term loan of the Khnzorian collection. Helena Shaverdo and Harald Schillhammer are furthermore thanked for drawing the map (Fig. 2) and for various other helpful suggestions. Thanks are due to Karl Hadulla for sending his Armenian material to the first author. The photographs of the pygidial sclerites of *Hydraena armeniaca* and *H. parysatis* were made by Michaela Brojer.

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Figs. 3–4: *Hydraena armeniaca*, aedeagus, 3) lateral and 4) ventral view.

Figs. 5–6: *Hydraena armeniaca*, 5) gonocoxite and 6) female tergite X.

Figs. 7–8: *Hydraena parysatis*, 7) gonocoxite and 8) female tergite X.

Fig. 9: *Limnebius setifer*, aedeagus, ventral view. Arrow pointing at apex of main piece.

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