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Aspidapion motschulskyi (HOCHHUTH) removed from synonymy with *A. aeneum* (FABRICIUS) (Coleoptera: Apionidae)

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Abstract

Aspidapion (*Koestlinia*) *motschulskyi* (HOCHHUTH, 1847) (comb.n., stat.rev.) is removed from synonymy with *Aspidapion* (*Koestlinia*) *aeneum* (FABRICIUS, 1775), redescribed and figured. A lectotype is designated for *Apion motschulskyi* HOCHHUTH, 1847. *Aspidapion motschulskyi* is recorded from Israel, Lebanon, Syria, Cyprus, Turkey, Iran, Afghanistan, Turkmenistan, Uzbekistan, Tajikistan, Kyrgyzstan and Kazakhstan. *Taphrotopium* (s.str.) *cuprifulgens* (SCHILSKY, 1906) is recorded from Turkey for the first time.

Key words: Coleoptera, Curculionoidea, Apionidae, *Aspidapion*, taxonomy, new combination, new rank, Palaearctic Region.

Introduction

Very often, common species do not particularly attract the attention of entomologists. Their synonymic lists can hide one or more taxa described many years before and later forgotten or erroneously synonymised; sometimes their careful examination leads to the discovery of cryptic taxa. This is the case, for example, of *Ceratapion gibbirostre* (GYLLENHAL, 1813), quoted for almost 200 years as *C. carduorum* (KIRBY, 1808) or the case of *Synapion ebeninum* (KIRBY, 1808) and its allied six new species (Giusto, in preparation).

The finding of six Turkish specimens in 2002, seemingly belonging to *Aspidapion* (*Koestlinia*) *aeneum* (FABRICIUS, 1775) was the starting point for an accurate study of this very common Palaearctic species and its synonyms.

The examination of almost 800 specimens previously attributed to *A. aeneum* and the study of the type series specified below allow for the removal of *Aspidapion* (*Koestlinia*) *motschulskyi* (HOCHHUTH, 1847) (comb.n., stat.rev.) from synonymy with *A. aeneum*.

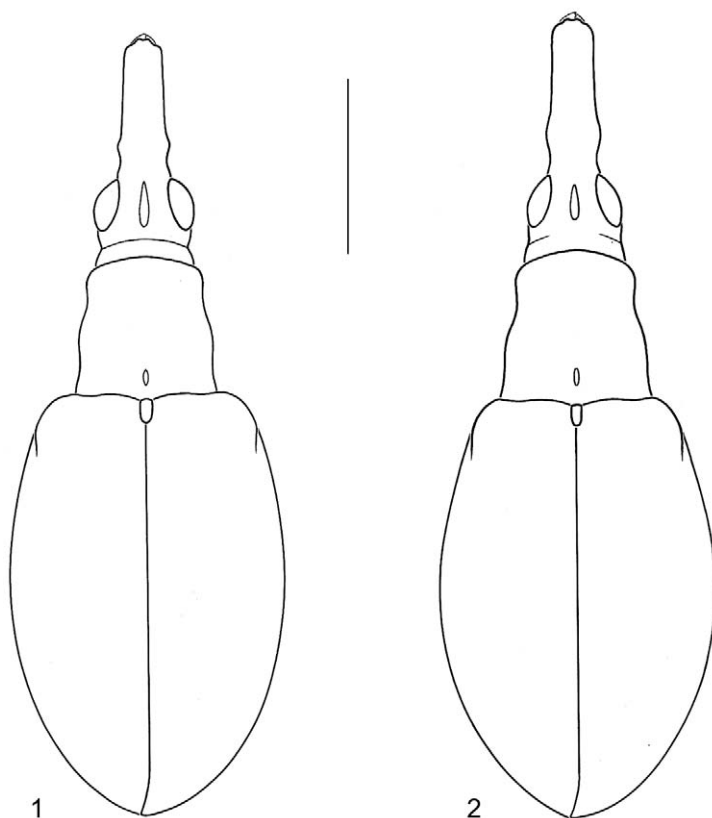
Aspidapion (*Koestlinia*) *motschulskyi* is redescribed below.

Measurements & Acronyms

The abbreviations of measurements (in alphabetical order) are as follows:

Le = length of elytra from anterior margin to apex, in dorsal view; Lp = length of prothorax from front margin to base along midline, in dorsal view; Lr = length of rostrum from apex (excluding mandibles) to fore margin of eye, in lateral view; We = width of elytra at their widest point, in dorsal view; Wmsr = width of mesorostrum at the obtuse dilation, in dorsal view; Wp = width of prothorax at the widest point, in dorsal view.

The body length was measured in dorsal view, from the base of the rostrum to the apex of the elytra, in a position in which they are at the same level. Mean values are given in parentheses. Measurements of *A. motschulskyi* are based on 50 exs. (25 ♂♂, 25 ♀♀) from Cyprus and on all the specimens from the remaining localities, those of *A. aeneum* on 200 exs. (108 ♂♂, 92 ♀♀) from Algeria, Spain, France, Italy, Austria and Ukraine. Measurements of the lectotype of *A. motschulskyi* are given in square brackets.



Figs. 1–2: Male habitus of 1) *Aspidapion motschulskyi* from Kuschke [= Kūshk] (Afghanistan); 2) *A. aeneum* from Monticello Amiata (Italy). Scale bar: 1 mm.

The specimens examined are deposited in the following institutions and private collections:

CC = Enzo Colonnelli coll., Rome, Italy; CG = Carlo Giusto coll., Recco, Italy; CM = Massimo Meregalli coll., Rivalta, Italy; CO = Giuseppe Osella coll., Verona, Italy; CS = Francesco Sacco coll., Rome, Italy; MRSN = Museo regionale di Scienze naturali, Turin, Italy; MSNG = Museo Civico di Storia Naturale “Giacomo Doria”, Genoa, Italy; NMP = Národní Muzeum v Praze, Praha, Czech Republic; NMW = Naturhistorisches Museum Wien, Austria; SDEI = Senckenberg Deutsches Entomologisches Institut, Müncheberg, Germany; TAU = Tel Aviv University, Israel; ZMUH = Zoologisches Institut und Zoologisches Museum der Universität Hamburg, Germany.

***Aspidapion (Koestlinia) motschulskyi* (HOCHHUTH, 1847) comb.n., stat.rev.**

Apion Motschulskyi HOCHHUTH 1847: 461 (original descr.); HOCHHUTH 1851: 101; WENCKER 1864: 205, 269; GEMMINGER 1871: 2467; DESBROCHERS DES LOGES 1897: 47; SCHILSKY 1906: XXIII; BEHNE 1991: 403.

[*Apion (Aspidapion)*] *motschulskyi*; VOSS 1959: 78, 161.

Apion (Aspidapion) aeneam [sic] v. *motschulskyi* (= v. *afghanisticum* [sic]); HOFFMANN 1961: 663.

Apion (Aspidapion) aeneum var. *afghanisticum* VOSS 1959: 78, 160.

Apion Motschulskyi; HOCHHUTH 1851: 9 [incorrect subsequent spelling].

Apion Motschoulskyi; KOLENATI 1858: 152 [incorrect subsequent spelling].

Apion aeneum; DESBROCHERS DES LOGES 1894: 42 [partim].

Apion (Aspidapion) aeneum; HEYDEN, REITTER & WEISE 1906: 698 [partim]; WAGNER 1910: 9 [partim]; WAGNER 1912: 42 [partim]; SCHATZMAYR 1923: 114 [partim].

Aspidapion (Koestlinia) aeneum; FRIEDMAN & FREIDBERG 2007: 70 [partim]; ALONSO-ZARAZAGA 2011: 153 [partim].

A.[pion] fallax HOCHHUTH 1851: 9 [nomen nudum].

[*Apion aeneum*] form *b* SCHILSKY 1906: CXV [not binominal name].

TYPE LOCALITY: HOCHHUTH (1847) did not specify the type locality; at the end of the description he generally wrote: "Baron Gotsch sammelte diese Art auf seiner Reise in vielen Exemplaren und an verschiedenen Orten". Stierlin, who bought the Hochhuth collection, added to the specimen designated below as lectotype the label with the indication "Caucasus" (BEHNE 1991), which can be considered the plausible type locality.

TYPE MATERIAL: **Lectotype** ♀ (SDEI), by present designation, labelled as follows: "Type" (white, printed), "Caucasus" (white with two blue stripes, handwritten), "coll. Stierlin" (white, printed), "Syntypus" (red, printed), "A. Motschulskyi / Hochh." (white, blue bordered, handwritten), "Wagner det. / = aeneum F." (white, partly handwritten), "A. motschulskyi / Hochh." (white, handwritten), "DEI Müncheberg / Col – 00009" (green, printed), "LECTOTYPUS ♀ / *Apion motschulskyi* / Hochhuth, 1847 / C. Giusto des., 2010" (orange, printed), "Aspidapion / motschulskyi / (Hochhuth, 1847) / C. Giusto det., 2010" (white, printed).

ADDITIONAL MATERIAL EXAMINED:

I S R A E L: 1 ♀: "Ascar B. Nablus / 600 m 3.VI.58", "W. Jordan / J. Klapperich [leg.]" (ZMUH); 1 ♂: "ISRAEL / Bet Lid / 25.iii.1981 / Q. Argaman [leg.]" (TAU); 1 ♂: "ISRAEL / Biddu – Judea / 31.V.1974 / D. Furth [leg.]" (TAU); 1 ♀: "ISRAEL: / Burma road / Near Bet Me ir / 21.vii.2002 / A. Freidberg [leg.]" (TAU); 2 ♀ ♀: "ISRAEL / Doshen / 15.XII.1977 / D. Furth [leg.]" (TAU); 1 ♀: "ISRAEL / 'En Te'o / 21.II.1973 / D. Furth [leg.]" (TAU); 1 ♀: "ISRAEL: / 'Ez Efrayim / 18.xi.1996 / L. Friedman [leg.] / on *Rhus tripartita*" (TAU); 1 ♀: "ISRAEL / W Faria / 11.III.1973 / D. Furth [leg.]" (TAU); 1 ♀: "ISRAEL / Ginosar / 29.V.1978 / D. Furth [leg.]" (TAU); 1 ♀: "ISRAEL / Hermon / 27.VI.1973 / D. Furth [leg.] / 1900 m" (TAU); 1 ♀: "ISRAEL / Mt. Hermon 1900 / 24.X.1977 / D. Furth [leg.]" (TAU); 1 ♀: "ISRAEL 1600 m / Mt. Hermon / 20.V.1986 / G. Eldar [leg.]" (TAU); 5 ♂ ♂, 2 ♀ ♀: "ISRAEL: 1600 m / Mt. Hermon / 14.v.1996 / V. Chikatunov [leg.]" (TAU); 3 ♂ ♂, 6 ♀ ♀: "35072. ISRAEL: / Har Hermon / 1600 m / 18.v.2009 / L. Friedman [leg.]" (CG); 1 ♂: "ISRAEL: 1650 m / Har Hermon / 3.ix.2008 / A. Freidberg [leg.]" (TAU); 1 ♂: "34956. ISRAEL: / Har Hermon / 2100 m / 17.v.2009 / L. Friedman [leg.]" (TAU); 4 ♂ ♂, 2 ♀ ♀: "ISRAEL: 1600 m / Har Hermon / 12.vi.2003 / L. Friedman [leg.]" (TAU); 1 ♂, 1 ♀: "ISRAEL: Har / Hermon, 1600 m / 23.v.1998 / A. Freidberg [leg.]" (TAU); 1 ♂, 1 ♀: "ISRAEL: Har / Hermon, 1600 m / 20.v.1997 / V. Chikatunov [leg.]" (TAU); 2 ♂ ♂, 2 ♀ ♀: "ISRAEL: 1800 m / Mt. Hermon / 25.V.1998 / V. Chikatunov [leg.]" (TAU); 1 ♂, 1 ♀: "ISRAEL: Har / Hermon, 1600 m / 20.v.1997 / L. Friedman [leg.] / on *Pyrus syriaca*" (TAU); 1 ♂: "ISRAEL: Har / Hermon, 1600 m / 20.v.1997 / L. Friedman [leg.] / on *Amygdalus* sp." (TAU); 12 ♂ ♂, 13 ♀ ♀: "ISRAEL: Har / Hermon, 1600 m / 26.vi.1997 / L. Friedman [leg.]" (TAU); 1 ♂, 2 ♀ ♀: "ISRAEL: Har / Hermon, 1600 m / 28.v.2000 / L. Friedman [leg.]" (TAU); 1 ♀: "ISRAEL: Har / Hermon, 1600 m / 17.vi.1999 / A. Freidberg [leg.]" (TAU); 1 ♂: "ISRAEL / Herut / 9.XII.1977 / D. Furth [leg.]" (TAU); 1 ♂, 1 ♀: "ISRAEL: / Herzliyya / 3.v.2006 / A. Freidberg [leg.]" (TAU); 1 ♀: "ISRAEL: / Karmel, 500 m / West of Peak / 14.v.2002 / A. Freidberg [leg.]" (TAU); 2 ♀ ♀: "ISRAEL: 950 m / Har Kefir / 6.ix.2007 / L. Friedman [leg.]" (TAU); 1 ♀: "ISRAEL: / Ma'ale Gilboa' / 3.ii.1999 / L. Friedman [leg.]" (TAU); 1 ♂: "ISRAEL / Mt. Mairm / 30.ix.1997 / A. Freidberg [leg.]" (TAU); 5 ♂ ♂, 2 ♀ ♀: "48988. ISRAEL: / Har Meron 1000 m / 11.iv.2010 / L. Friedman [leg.]" (CG); 4 ♂ ♂, 3 ♀ ♀: "ISRAEL: / Har Meron / 19.v.1998 / L. Friedman [leg.]" (TAU); 4 ♂ ♂: "ISRAEL: / Har Meron / 26.v.1999 / V. Chikatunov [leg.]" (TAU); 2 ♂ ♂, 1 ♀: "ISRAEL: Har / Meron, 800 m / 22.v.1998 / A. Freidberg [leg.]" (TAU); 4 ♂ ♂, 8 ♀ ♀: "ISRAEL: Har / Meron, 1100 m / 26.v.1999 / L. Friedman [leg.]" (TAU); 1 ♀: "ISRAEL: / Har Meron, 1100 m / 32°59,8'N35°25'E / 22.xi.2006 / L. Friedman [leg.]" (TAU); 2 ♂ ♂, 2 ♀ ♀: "ISRAEL: Har / Meron, 1100 m / 21.x.1996 / A. Freidberg [leg.]" (TAU); 2 ♀ ♀: "ISRAEL: Har / Meron, 1100 m / 21.x.1996 / V. Chikatunov [leg.] / on *Quercus calliprinos*" (TAU); 1 ♀: "ISRAEL: Har / Meron, 1100 m / 21.x.1996 / N. Dorchin [leg.] / on *Quercus* sp." (TAU); 1 ♀: "ISRAEL: / Har Meron, 1100 m / 32°59, 8'N35°25'E / 22.xi.2006 / W. Kuslitsky [leg.]" (TAU); 1 ♀: "ISRAEL: Har / Meron Reserve / 'En Zeved / 32°59'N 35°26'E / 24.iv.2002 / L. Friedman [leg.]" (TAU); 1 ♀: "Israel Nahal / Barquan 15.3.[19]97 / R. Hoffman [leg.]" (TAU); 1 ♂, 2 ♀ ♀: "ISRAEL: / Nahal Oren #4 / 30.v.1998 / A. Freidberg [leg.]" (TAU); 1 ♀: "ISRAEL: / Nahal Oren / 32°43'N35°01'E / 26.v.2004 / A. Freidberg [leg.]" (TAU); 1 ♀: "ISRAEL: N. Oren / S3 17.xi.1997 / V. Chikatunov / T. Pavliček [leg.]" (TAU); 1 ♂: "ISRAEL: Nahal / Oren 1.xii.1997 B / V. Chikatunov / T. Pavliček [leg.]" (TAU); 2 ♂ ♂, 3 ♀ ♀: "ISRAEL: Nahal / Oren S-1 / 15.xii.1997 / L. Friedman [leg.]" (TAU); 1 ♀: "ISRAEL / N. Oren / 9.V.79 / D. Furth [leg.]" (TAU); 1 ♂, 1 ♀: "Nahal Oren, Mt. Carmel / Israel, 17.XII.[19]96 leg. / Pavliček & Chikatunov" (TAU); 1 ♀: "ISRAEL / Rehov / 6 km S Bet Shean /

- 29.XI.1972 / coll.: D. Furth" (TAU); 1 ♀: "ISRAEL / Sha'ar / ha'Amaqim / 25.iii.1981 / Q. Argaman [leg.]" (TAU); 1 ♂: "ISRAEL: Tel / Aviv Zoo / 19.iv.1999 / H. Ackerman [leg.]" (TAU); 1 ♀: "Israel Vodfat / 21.2.98 / R. Hoffman [leg.]" (TAU); 2 ♂♂: "ISRAEL: Yavne'el / 21.II.1973 / D. Furth [leg.]" (TAU).
- L E B A N O N: 1 ♂: "LIBANO: Caza Chouf: / Beit El Din [= Beit Al Dine] m 900 / 29-30.V.[19]72 P. Brignoli leg." (CO).
- S Y R I A: 1 ♀: "SYRIA: Banias 30 km E / Qusaybah E / 2.VI.2009 / M Šarovec leg." (CG); 7 ♂♂, 2 ♀♀: "Dint. Damasco / Febr. Mag. 1889 / Medana [leg.]", "[Apion] aeneum / det. Desbr[ochers]." (MSNG); 1 ♂: "SYRIA: 1336 m / Slinfeh / 1.v.2008 / 35°36'N 36°12'E / G. Sabatinelli [leg.]" (TAU).
- C Y P R U S: 1 ♀: "CYPRUS: Arôdes: Avagas Gorges [ΚΥΠΡΟΣ: Ἀρόδες: φαράγγια Αβαγάς] / m 40 / 21.IV.2010, C. Giusto leg.", "34°55'N-32°20'E" (CG); 88 ♂♂, 74 ♀♀: "CYPRUS: Cedar Valley [ΚΥΠΡΟΣ: Κοιλάδα των Κέδρων] / m 1.050 / 20.IV.2010, C. Giusto leg.", "34°59'N-32°41'E", "migration on trees" (CG); 3 ♂♂, 1 ♀: "CYPRUS: Drouseia [ΚΥΠΡΟΣ: Δρούσειας] / m 550 / 19.IV.2010, C. Giusto leg.", "34°57'N-32°23'E", "on: *Malva sylvestris* L." (CG); 3 ♂♂: "CYPRUS: surroundings of Drouseia [ΚΥΠΡΟΣ: περίχωρα Δρούσειας] / m 500-600 / 18.IV.2010, C. Giusto leg.", "34°58'N-32°24'E", "on: *Malva sylvestris* L." (CG); 1 ♂: "CYPRUS: 600 m / Kalopanagiotis / 34°70'N 32°50'E / 22.iv.2006 / A. Freidberg [leg.]" (TAU); 1 ♂: "CYPRUS: Kannaviou [ΚΥΠΡΟΣ: Κανναβίου] / m 500 / 20.IV.2010, C. Giusto leg.", "34°54'N-32°34'E" (CG); 3 ♂♂, 2 ♀♀: "CYPRUS: Larnaca district: Pyla [ΚΥΠΡΟΣ: επαρχία Λάρνακας: Πύλα] / m 50 / 17.IV.2010, C. Giusto leg.", "35°01'N-33°41'E", "on: *Lavatera cretica* L." (CG); 25 ♂♂, 17 ♀♀: "CYPRUS: Troodos / Caledonia Falls / Krios River, 1600 m / 1 km N Pano Platres / 10.viii.2005 / L. Friedman [leg.]" (TAU); 17 ♂♂, 14 ♀♀: "CYPRUS: Troódos: Olympus [ΚΥΠΡΟΣ: Τροόδος: Όλυμπος] / m 1.900 / 22.IV.2010, C. Giusto leg.", "34°58'N-32°51'E", "migration on: *Pinus caramanica* (Loud.) Rehd." (CG); 1 ♂, 3 ♀♀: "CYPRUS: Troódos: Olympus [ΚΥΠΡΟΣ: Τροόδος: Όλυμπος] / m 1.950 / 22.IV.2010, C. Giusto leg.", "34°58'N-32°51'E", "migration on: *Juniperus foetidissima* Willd." (CG); 2 ♂♂, 3 ♀♀: "CYPRUS: Troodos / Pano Platres / Krios River, 1500 m / 10.viii.2005 / L. Friedman [leg.]" (TAU); 1 ♀: "CYPRUS: Stavros tis Psókas [ΚΥΠΡΟΣ: Σταυρός της Ψόκας] / m 1.000 / 20.IV.2010, C. Giusto leg.", "35°01'N-32°37'E" (CG).
- T U R K E Y: 1 ♂: "Abant Bolu / P. Brignoli leg." (CO); 1 ♂: "Efes / P. Brignoli leg." (CO); ♂♂: "Turkey: Çamlıyayla / (İçel) m 1.410 / 2.VI.2002 / C. Giusto & S. Zoia leg." (CG); 1 ♂, 2 ♀♀: "Turkey: SE Iskenderun: / Topboğasi Geçidi / (Antakia) m 780 31.V. / 2002 C. Giusto & S. Zoia leg." (CG); 3 ♂♂, 2 ♀♀: "TURKEY: / Belen, 15 km S / Iskenderun / 700 m, 10.v.2000", "A. Freidberg / H. Ackerman / L. Friedman [leg.]" (TAU).
- "C A U C A S U S": 1 ♀: "Caucaso / Doria [leg.]. 62", "[Apion] aeneum / det. Desbr[ochers]." (MSNG).
- I R A N: 2 ♂♂, 4 ♀♀: "PERSIA / Astrabad [= Gorgan] 4.99 / Coll. Hauser", "Wagner det. / [Apion] aeneum F." (CG, MRSN); 4 ♂♂, 1 ♀: "PERSIA / Astrabad [= Gorgan] 5.99 / Coll. Hauser", "Wagner det. / [Apion] aeneum F." (CG, CG, CS); 2 ♂♂, 2 ♀♀: "PERSIA / Kermanschah [= Kermānshāh]", "Wagner det. / [Apion] aeneum F." (CG); 12 ♂♂, 2 ♀♀: "Persia Settent.e / 1862-63 / Coll. G. Doria", "[Apion] aeneum / det. Desbr[ochers]." (MSNG).
- A F G H A N I S T A N: 1 ♀: "J. Klapperich / Kandahar – Kuna / 1200 m, 1.3.53 / S-Afghanistan", "A. aeneum F. / v. afghanista- / nicum m.", "para- / ⚡TYPUS.", "Coll. E. Voss. / Eing. 3 – 57"; 1 ♀: "J. Klapperich / Kandahar / 950 m, 2.3.53 / S-Afghanistan", "A. aeneum F. / v. afghanista- / nicum m.", "para- / ⚡TYPUS.", "Coll. E. Voss. / Eing. 3 – 57", "Aspidapion / motschulskyi / (Hochhuth, 1847) / C. Giusto det., 2010" (ZMUH); 1 ♀: "J. Klapperich / Ghorbandtal / 1900 m, 23.6.[19]53 / O-Afghanistan", "A. aeneum F. / v. afghanista- / nicum m.", "para- / ⚡TYPUS.", "v. afghanista- / nicum Voß", "Coll. E. Voss. / Eing. 3 – 57", "Aspidapion / motschulskyi / (Hochhuth, 1847) / C. Giusto det., 2010" (ZMUH); 10 ♂♂, 6 ♀♀: "AFGHANISTAN / Kuschke [= Kūshk] / Coll. Hauser 1896", "Wagner det. / [Apion] aeneum F." (CG, CM); 1 ♀: "J. Klapperich / Kandahar – Kuna / 1200 m, 1.3.[19]53 / S-Afghanistan", "A. aeneum F. / v. afghanista- / nicum m.", "para- / ⚡TYPUS.", "Coll. E. Voss. / Eing. 3 – 57", "Aspidapion / motschulskyi / (Hochhuth, 1847) / C. Giusto det., 2010" (ZMUH).
- T U R K M E N I S T A N: 2 ♂♂: "TRANSCASP. / Merw [= Mary] 4.1900 / Coll. Hauser", "Wagner det. / [Apion] aeneum F." (CG); 1 ♂, 1 ♀: "TRANSCASP. / Merw [= Mary] 5.1900 / Coll. Hauser", "Wagner det. / [Apion] aeneum F." (CG, MRSN).
- U Z B E K I S T A N: 1 ♂, 1 ♀: "OST-BUCHARA / Tschitschantan / Nulswald [Nusswald] F. Hauser 1898", "Wagner det. / [Apion] aeneum F." (CG).
- T A J I K I S T A N: 1 ♀: "TURKESTAN / Mts. Ghissar / F. Hauser [leg.] 1898" (MRSN).
- K Y R G Y Z S T A N: 1 ♂: "Alai-G. Scha- / himard. [= Shakhimardan] 6300", "Wagner det. / [Apion] aeneum F." (MRSN); 1 ♀: "USSR Kirgizia / Chatkalskiy Mts. / Aslan-bob 1800 m / 12-13.vii.1991, O. Mehl [leg.]" (SDEI); 1 ♂: "TURK. JSSYK-KUL. / Terski-tau / 6.1902. Coll. Hauser", "Wagner det. / [Apion] aeneum F." (CG); 5 ♂♂: "TURK., SUSSAMIR-GB. / Ketmen-Tjube", "[Apion aeneum] a. chalceum, Mrsh. / det. F. Schubert" (CG); 2 ♂♂, 1 ♀: "TURK., SUSSAMIR-GB. / Ketmen-Tjube / 6.06 Coll. Hauser", "Wagner det. / [Apion] aeneum F." (CG); 1 ♂: "Ketmen-tjube / Sussamir Tau / Turk. Hauser" (NMW).
- K A Z A K H S T A N: 1 ♂, 1 ♀: "Kazach.SSR: / Karatau Mts. / W. Lake Biukol / 15.VI.1982" (NMP).

Uncertain locality: 2 ♀♀: "Transcasp. / Mursarabat", "A[pion]. aeneum F. / Faust det.", "Wagner det. / [Apion] aeneum F." (MRSN); 1 ♂: "Turkestan / Tschimght", "A[pion]. aeneum F. / Faust det.", "Wagner det. / [Apion] aeneum F." (CG).

DESCRIPTION: Body and femora black; elytra with blue or blue-violet metallic tinge; tibiae and tarsi brown to brownish-black; antennae brown to pitch-brown. Body vestiture composed of recumbent piliform scales very fine only on rostrum, prothorax and elytra, elsewhere thicker; scales sparse, dense only on procoxae and mesothoracic epimera. Length of body: ♂♂ 2.97–3.41 (3.23) mm, ♀♀ 3.20–3.47 (3.35) [3.33] mm.

Rostrum as in Figs. 3–6; finely and densely punctate; punctures round or round-oblong, 20–29 µm in diameter, separated by less than half their diameter; interspaces microreticulate, shining to dull. In dorsal view, prorostrum with straight sides, very weakly tapering to apex; mesorostrum angled, forming an obtuse, roundish tooth; metarostrum with more or less feebly concave sides. In lateral view, prorostrum and metarostrum uniformly curved; prorostrum almost cylindrical, very feebly tapering to apex. In ventral view, prorostrum with a smooth and shining median keel, ventral and latero-ventral sulci developed, punctate. Lr: ♂♂ 0.83–0.99 (0.91) mm; ♀♀ 0.95–1.06 (0.99) [0.99] mm; Wmsr: ♂♂ 0.27–0.33 (0.31) mm; ♀♀ 0.29–0.32 (0.30) [0.30] mm; (Lp+Le)/Lr: ♂♂ 3.31–3.74 (3.45); ♀♀ 3.11–3.38 (3.23) [3.22]; Lr/Lp: ♂♂ 1.02–1.19 (1.11); ♀♀ 1.15–1.29 (1.21) [1.29]; Lr/Wmsr: ♂♂ 2.80–3.15 (2.96); ♀♀ 3.19–3.45 (3.30) [3.30]. Head conical; frons convex and deeply foveolate; punctures of frons coarse and thick, round to oblong, 15–25 µm in diameter, separated by less than half their diameter; interspaces microreticulate. Vertex and temples entirely glabrous, wrinkled, with microscopic and very sparse punctation. Gula, in profile, with a strongly prominent transverse keel, roundly incised in the middle so it looks like two teeth. Eyes moderately convex, slightly oblong. Antennae inserted at basal 0.23–0.30 of rostrum; scape rather elongate and apically clubbed, as long as first two funicular segments combined; 1st funicular segment globose-elongate, two times as long as wide; 2nd feebly elongate; 3rd–7th almost isodiametric; club elongate, fusiform, three-segmented, longer than last five funicular segments.

Prothorax (Fig. 1) almost isodiametric, campanulate, with curved sides, constricted behind anterior margin and slightly constricted before base, widest at base. Basal flange absent. Pronotum convex, finely and densely punctured; punctures round, 15–25 µm in diameter, separated by less than half their diameter; interspaces microreticulate, dull. Lp: ♂♂ 0.73–0.92 (0.82) mm; ♀♀ 0.77–0.87 (0.82) [0.77] mm; Wp: ♂♂ 0.69–0.91 (0.81) mm; ♀♀ 0.77–0.87 (0.81) [0.80] mm; Lp/Wp: ♂♂ 0.96–1.06 (1.02); ♀♀ 0.96–1.06 (1.01) [0.96]. Scutellum two times longer than wide. Elytra (Fig. 1) elongate, oval, widest at middle. Interstriae flat, very finely microreticulate, shining, on the elytral disc about 4.5–5.5 times as wide as striae; each interstria bearing three rows of very fine piliform scales. Striae poorly impressed, sparingly punctate, each puncture bearing a very fine piliform scale. At base 1st stria incurved and shortened before the scutellar area, 2nd incurved, 6th and 7th respectively shortened against and below the humeral callus; at apex striae join in the following way: 1+2+9, 3+4, 5+6, 7+8. Humeral calli well developed. One sensory seta present on apical section of 9th interstria. Le: ♂♂ 2.10–2.52 (2.32) mm; ♀♀ 2.27–2.51 (2.38) [2.42] mm; We: ♂♂ 1.28–1.57 (1.42) mm; ♀♀ 1.40–1.52 (1.47) [1.50] mm; Le/We: ♂♂ 1.57–1.70 (1.63); ♀♀ 1.57–1.67 (1.62) [1.61]. All male tibiae mucronate at apex, protibial mucro (Fig. 23) short and stout, hardly protruding from the apical cluster of brownish setae. Male protibiae apically weakly incurved. Tarsi moderately elongate as in Fig. 26. Metathoracic wings well developed.

Tegmen as in Figs. 19, 21. Penis shaped as in Figs. 11, 13, 15, 17. Spermatheca as in Fig. 28. Gonocoxite sub-triangular, approximately 3.5–4.0 times as long as wide; styli cylindrical with 6–8 macrochaetae at apex.

DIFFERENTIAL DIAGNOSIS: *Aspidapion motschulskyi* is closely related to *A. aeneum*. This species can be distinguished from the former as follows: body, on average, smaller (length of specimen: ♂♂ 2.81–3.58 (3.10) mm, ♀♀ 2.72–3.45 (3.16) mm; rostrum, head and prothorax more shining with finer and sparser punctation and interspaces less microreticulate; rostrum (Figs. 7–10) more distinctly sexually dimorphic; prorostrum with sides feebly incurved, never weakly tapering to apex; mesorostrum with a dilatation broadly rounded never forming obtuse and roundish teeth; Lr: ♂♂ 0.72–0.97 (0.82) mm; ♀♀ 0.81–0.98 (0.93) mm; Wmsr: ♂♂ 0.28–0.33 (0.30) mm; ♀♀ 0.25–0.31 (0.30) mm; Lp+Le/Lr: ♂♂ 3.55–3.73 (3.65); ♀♀ 3.19–3.45 (3.32); Lr/Lp: ♂♂ 1.00–1.06 (1.03); ♀♀ 1.12–1.21 (1.15); Lr/Wmsr: ♂♂ 2.58–2.91 (2.73); ♀♀ 3.10–3.17 (3.13). Gular keel well developed but less prominent. Eyes less convex. Prothorax (Fig. 2) more campanulate; Lp: ♂♂ 0.69–0.92 (0.79) mm; ♀♀ 0.70–0.87 (0.81) mm; Wp: ♂♂ 0.69–0.91 (0.79) mm; ♀♀ 0.72–0.89 (0.83) mm; Lp/Wp: ♂♂ 0.96–1.04 (1.00); ♀♀ 0.95–1.02 (0.98). Elytra (Fig. 2) with humeral calli less developed; Le: ♂♂ 2.03–2.52 (2.21) mm; ♀♀ 2.00–2.42 (2.29) mm; We: ♂♂ 1.22–1.57 (1.34) mm; ♀♀ 1.16–1.49 (1.39) mm; Le/We: ♂♂ 1.59–1.68 (1.65); ♀♀ 1.62–1.71 (1.66). Male protibiae apically more incurved with mucro conspicuous, clearly projecting over the apical cluster of brownish setae (Figs. 24–25). Tarsi more dilated (Fig. 27). Tegmen as in Figs. 20, 22. Penis as in Figs. 12, 14, 16, 18. Spermatheca as in Fig. 29. Styli cylindrical with 12–15 macrochaetae at apex.

VARIABILITY: *Aspidapion motschulskyi* shows a clinal variation of some morphological characters such as the sexual dimorphism of the rostrum, the dilation of the mesorostrum, the convexity of the eyes, the dimension of the gular keel and the shapes of prothorax and elytra: the studied populations – from Iran to Kyrgyzstan – show an extremely reduced sexual dimorphism of the rostrum; mesorostrum angled, almost dentate; convex eyes; gula with a very prominent keel; prothorax on average longer than wide, with a strong constriction behind anterior margin; elytra with humeral calli strongly developed. The aforementioned characters become less evident in the western populations so that the distinction between *A. motschulskyi* and *A. aeneum*, sometimes, turns out to be difficult.

GEOGRAPHICAL DISTRIBUTION (Fig. 30): Israel, Lebanon, Syria, Cyprus, Turkey, Iran, Afghanistan, Turkmenistan, Uzbekistan, Tajikistan, Kyrgyzstan and Kazakhstan. Hitherto also generally recorded from “Caucasus” (KOLENATI 1858: 152; WENCKER 1864: 205; GEMMINGER 1871: 2467; DESBROCHERS DES LOGES 1897: 47) and “Transcaucasia” (KOLENATI 1858: 152).

VOSS (1959: 78) described the variety *afghanisticum* upon specimens from the aforementioned localities of Kandahar, Kandahar-Kuna and Ghorbandtal (see the additional material examined) and further Afghan specimens from Pagman Mts., Do-Schak and Khinjan Valley [= Khinjan]. Two years later, HOFFMANN (1961: 663) recorded this species from Afghanistan too: “Gaudgé-Konti”.

HOST PLANTS: *Malva sylvestris* LINNAEUS and *Lavatera cretica* LINNAEUS. As quoted by HOFFMANN (1961: 663), Remaudière found this taxon in Afghanistan associated to the genus *Althaea* LINNAEUS. In Cyprus, mass migrations to *Pinus caramanica* (LOUDON) REHDER and *Juniperus foetidissima* WILLDENOW have been observed. *Rhus tripartita* (UCRIA) GRANDE, *Pyrus syriaca* (BOISSIER), *Quercus calliprinos* WEBB, *Quercus* sp. and *Amygdalus* sp. represent occasional refuge plants.

DISCUSSION: Bibliographical data indicate that *A. aeneum* is widely distributed in the Palaearctic Region. It is recorded throughout Europe from Sweden to Spain and Greece, in North Africa from Morocco to Tunisia, in the Caucasian Region and in Siberia. The recognition of *A. motschulskyi* as good species makes uncertain the eastern boundary of the distribution of *A. aeneum*; citations of the latter species from the following countries still must be verified: Cyprus (ALONSO-ZARAZAGA 2011: 153); Israel (VOSS 1964: 389; ALONSO-ZARAZAGA 2011: 153);

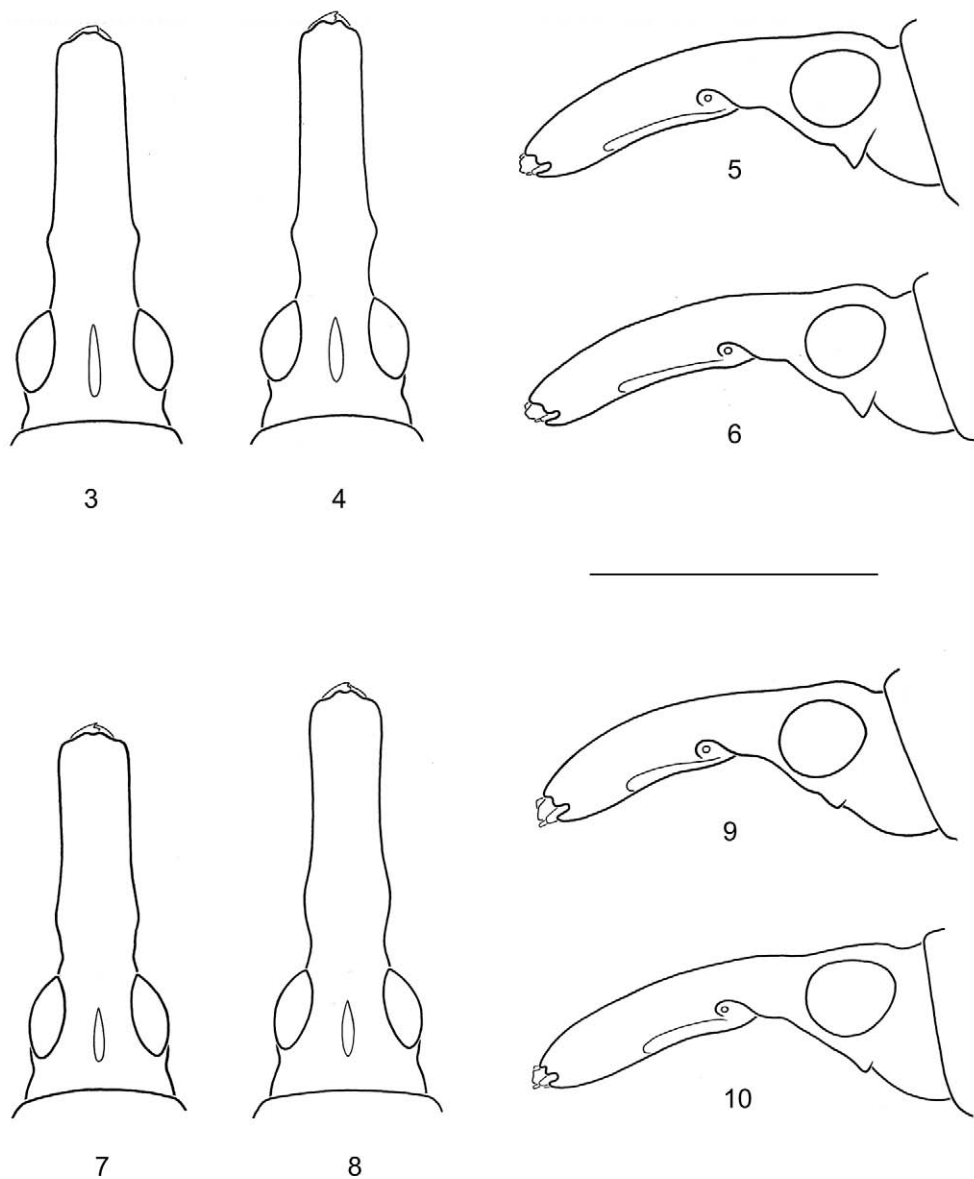
Lebanon (ALONSO-ZARAZAGA 2011: 153); Syria (SCHILSKY 1901: 71a; 1906: XXXIII; WAGNER 1906: 22; ALONSO-ZARAZAGA 2011: 153); Turkey (KÖSTLIN 1985: 42); “Anatolia” (SAHLBERG 1913: 202); “Caramania” (SAHLBERG 1913: 202); Armenia (SCHNEIDER & LEDER 1879: 305; TER-MINASSIAN 1940: 16; 1946: 147; 1972: 797; ALONSO-ZARAZAGA 2011: 153), Georgia (TER-MINASSIAN 1972: 797; ALONSO-ZARAZAGA 2011: 153); Russia: South Federal District (SOLODOVNIKOVA 1969: 289; TER-MINASSIAN 1972: 797; KOROTYAEV et al. 1993: 841; BOLOV & BOLOV 1997: 779; ALONSO-ZARAZAGA 2011: 153), Central Federal District (ARNOL’DI, TER-MINASSIAN & SOLODOVNIKOVA 1974: 222), Volga Federal District (LEBEDEV 1906: 430; ISAEV 1990: 94), Urals Federal District (ARNOL’DI, TER-MINASSIAN & SOLODOVNIKOVA 1974: 222); Azerbaijan (MÉNÉTRIES 1832: XXIII; SCHNEIDER & LEDER 1879: 305; TER-MINASSIAN 1940: 16; 1972: 797; ALONSO-ZARAZAGA 2011: 153); “Caucasus” (MÉNÉTRIES 1832: XXIII; KOLENATI 1858: 154); “Transcaucasus” (KOLENATI 1858: 154; ARNOL’DI, TER-MINASSIAN & SOLODOVNIKOVA 1974: 222; NASREDDINOV 1975: 552); Iran (HOFFMANN 1968: 153; BORUMAND 1998: 5; ALONSO-ZARAZAGA 2011: 153); Afghanistan (FRIEDMAN & FREIDBERG 2007: 71; ALONSO-ZARAZAGA 2011: 153); Uzbekistan (SCHILSKY 1901: 71a; 1906: XXXIII; ALONSO-ZARAZAGA 2011: 153); Tajikistan (NASREDDINOV 1975: 552; FRIEDMAN & FREIDBERG 2007: 71); Kyrgyzstan (FAUST 1894: 146; ALONSO-ZARAZAGA 2011: 153); Kazakhstan (BAJTENOV 1974: 277; NASREDDINOV 1975: 552; KÖSTLIN 1985: 42; FRIEDMAN & FREIDBERG 2007: 71; ALONSO-ZARAZAGA 2011: 153); Turkmenistan (ALONSO-ZARAZAGA 2011: 153); “Turkestan” (SCHILSKY 1901: 71a; WAGNER 1906: 22) and more generally “Eurasia” (TER-MINASSIAN 1946: 147) and “Asia” (WAGNER 1910: 9; 1912: 42; SCHATZMAYR 1923: 114; ARNOL’DI, TER-MINASSIAN & SOLODOVNIKOVA 1974: 222; BAJTENOV 1974: 277; NASREDDINOV 1975: 552). Till now, no intermediate specimens (*aeneum/motschulskyi*) have been observed.

It can be assumed that *A. motschulskyi* and *A. aeneum* are probably sympatric in the Caucasian Region and in the north of the Turanian Region. *Aspidapion motschulskyi* is a Turanian element and *A. aeneum* is an Euro-Mediterranean one or, more likely, a Turanian-Euro-Mediterranean element (sensu VIGNA TAGLIANTI et al. 1999: 38).

Their distributions partly echo those of *Ceratapion (Acanephodus) onopordi onopordi* (KIRBY, 1808) and *C. (A.) o. parviclava* (DESBROCHERS DES LOGES, 1897): as reported by WANAT (1995: 212, 218: map 8, 220, 221), the areas of these taxa barely overlap in western Turkey, Armenia and northwestern Iran and the presence of few intermediate specimens is recorded from Bulgaria (Pirin), Greece (Central Macedonia, Peloponnese, Crete), Turkey (Diyarbakır), “Caucasus”, Azerbaijan (The Nakhchivan Autonomous Republic) and northern Iraq.

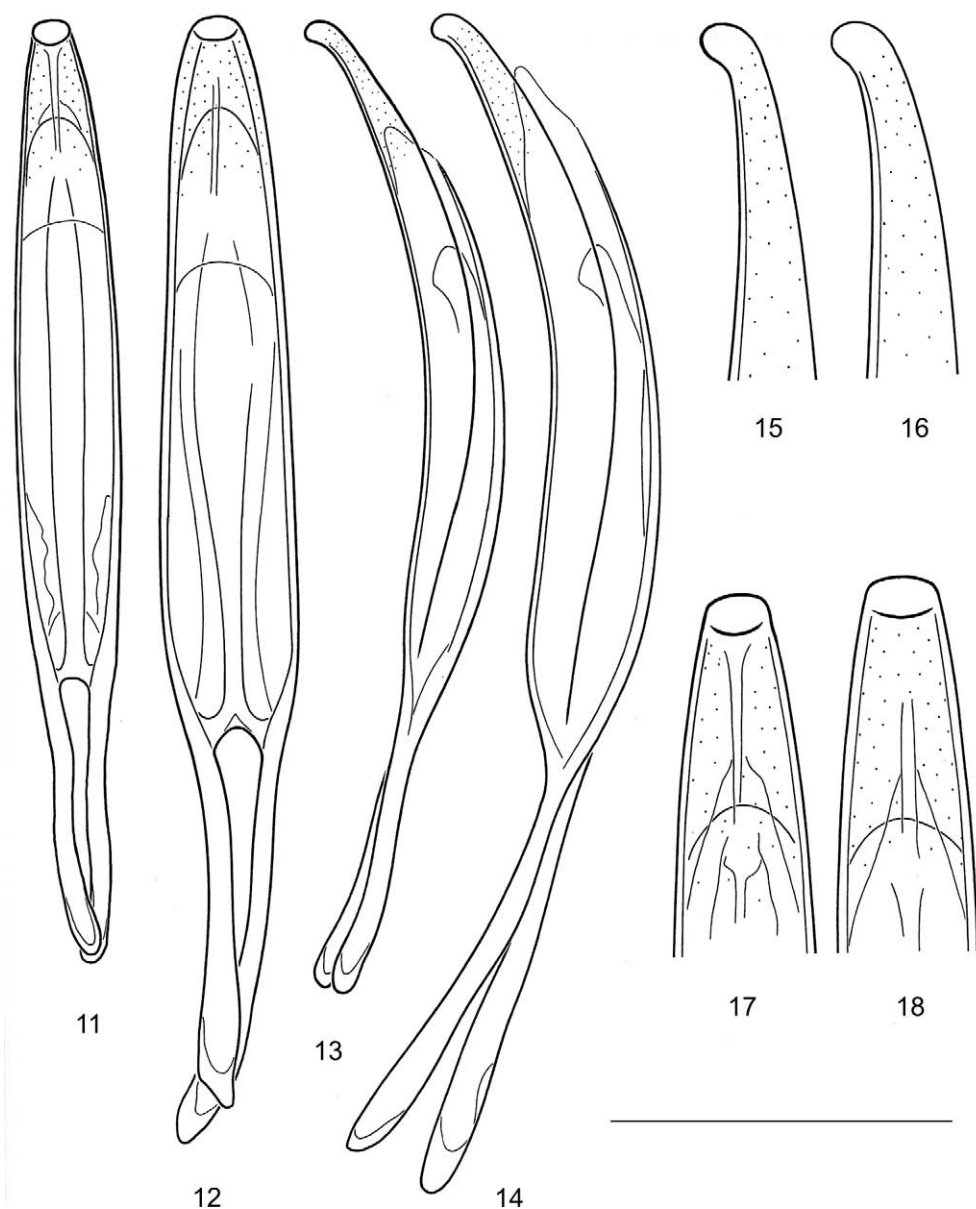
The relationship between *A. motschulskyi* and *A. aeneum* and their distributional patterns also show some parallels with those of the vicariant species *Diplapion sareptanum* (DESBROCHERS DES LOGES, 1867) and *Diplapion hamatum* (WAGNER, 1906) (WANAT 1995: 66 (map 6), 158, 159), or, better, with those of *Taphrotopium* (s.str.) *cuprifulgens* (SCHILSKY, 1906) and its allied *Taphrotopium* (s.str.) *sulcifrons* (HERBST, 1797) (WANAT 1995: 63, 65 (map 5), 94–101). To complete the distribution of *T. cuprifulgens* provided by WANAT (1995), the first finding of 2 ♀♀ (CG) of *T. cuprifulgens* in Turkey (“Turkey: 5 km NW / Kilis (Gaziantep) / m 500 30.V.2002 / C. Giusto & S. Zoia leg.”) is here recorded. It significantly extends the range of this species to the west supporting the assumption of WANAT (1995: 101) that “probably SCHATZMAYR’s (1925) account of *T. sulcifrons* in Syria could be referred to this species [*T. cuprifulgens*]”.

The study of additional material, particularly from the Caucasian Region and the Turanian Region, will allow to delineate the real limits of distribution of *A. motschulskyi* and *A. aeneum*.



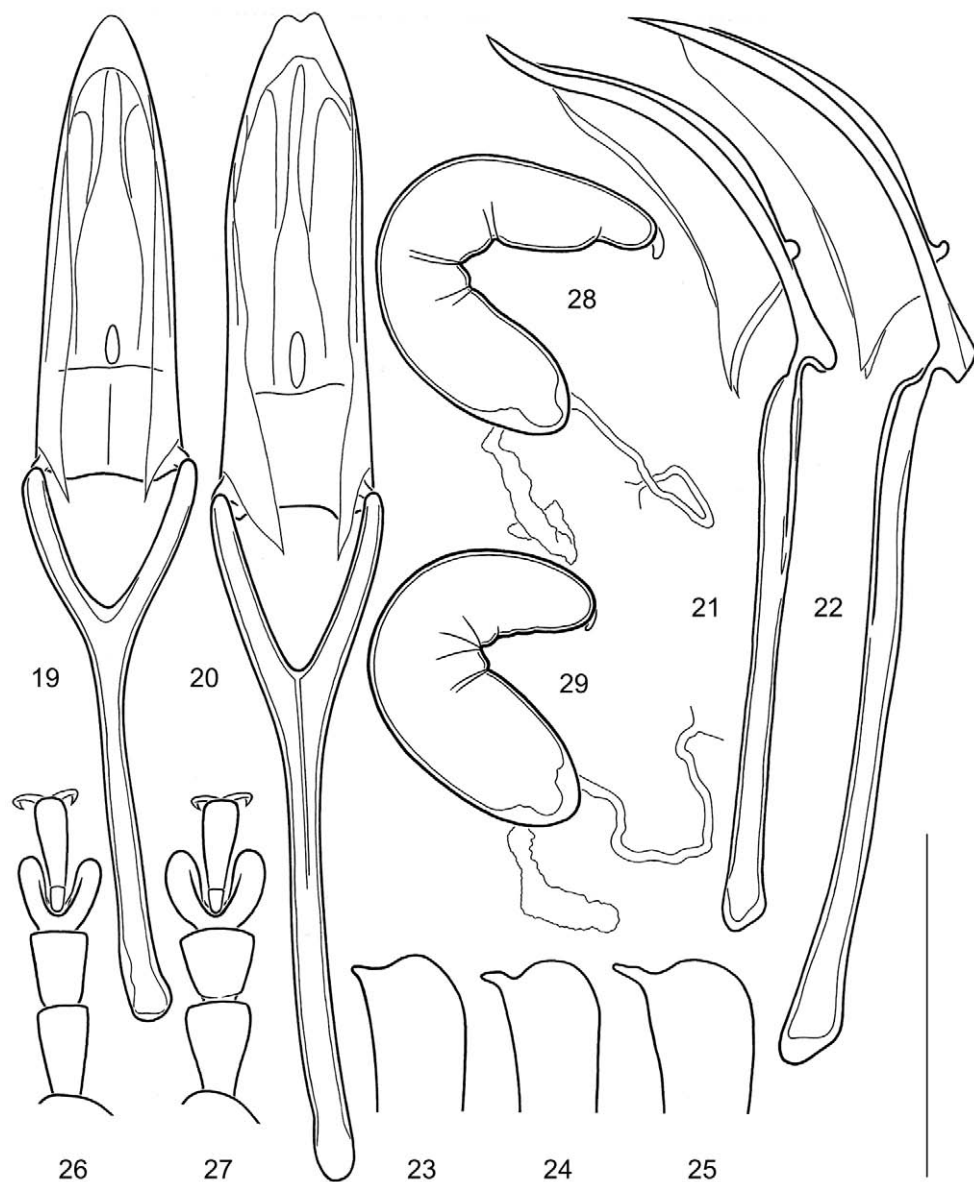
Figs. 3–6: Male and female head and rostrum in dorsal and lateral view of *Aspidapion motschulskyi* from Kuschke [= Kūshk] (Afghanistan): 3, 5 (♂); 4, 6 (♀). Scale bar: 1 mm.

Figs. 7–10: Male and female head and rostrum in dorsal and lateral view of *Aspidapion aeneum* from Monticello Amiata (Italy): 7, 9 (♂); 8, 10 (♀). Scale bar: 1 mm.



Figs. 11–14: Penis in ventral and lateral view of 11, 13) *Aspidapion motschulskyi* from Kuschke [= Kūshk] (Afghanistan); 12, 14) *A. aeneum* from Monticello Amiata (Italy). Scale bar: 0.5 mm.

Figs. 15–18: Apex of penis in ventral and lateral view of 15, 17) *Aspidapion motschulskyi* from Kuschke [= Kūshk] (Afghanistan); 16, 18) *A. aeneum* from Monticello Amiata (Italy). Scale bar: 0.3 mm.



Figs. 19–22: Tegmen in ventral and lateral view of 19, 21) *Aspidapion motschulskyi* from Kuschke [= Kūshk] (Afghanistan); 20, 22) *A. aeneum* from Monticello Amiata (Italy). Scale bar: 0.5 mm.

Figs. 23–25: Apex of male right protibia (apical setae have been removed) of 23) *Aspidapion motschulskyi* from Kuschke [= Kūshk] (Afghanistan); 24–25) *A. aeneum* from Monticello Amiata (Italy). Scale bar: 0.5 mm.

Figs. 26–27: Male right protarsus of 26) *Aspidapion motschulskyi* from Kuschke [= Kūshk] (Afghanistan); 27) *A. aeneum* from Monticello Amiata (Italy). Scale bar: 0.5 mm.

Figs. 28–29: Spermatheca of 28) *Aspidapion motschulskyi* from Kuschke [= Kūshk] (Afghanistan); 29) *A. aeneum* from Monticello Amiata (Italy). Scale bar: 0.3 mm.

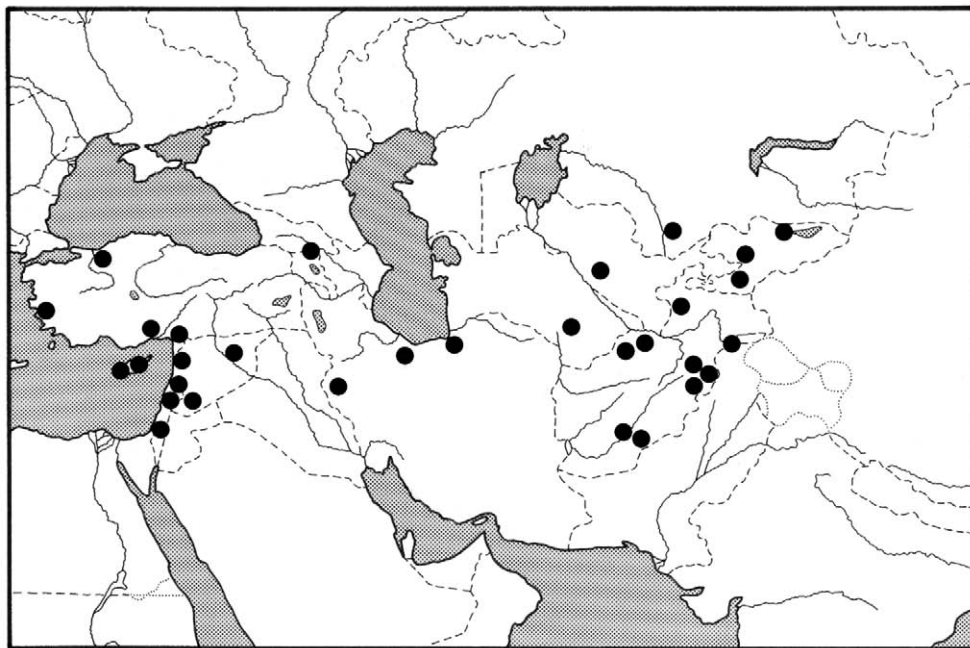


Fig. 30: Geographical distribution of *Aspidapion motschulskyi*.

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