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## On the identity of *Amblystomus levantinus* REITTER 1893, and remarks on *A. metallescens* (DEJEAN 1829) (Coleoptera, Carabidae, Harpalini, Amblystomina)

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**A b s t r a c t :** After investigation of type series of some nominal taxa the following synonymies are proposed: *Amblystomus metallescens* (DEJEAN 1829) = *A. levantinus* REITTER 1883, nov.syn. = *A. levantinus* ssp. *laevistriatus* SCHATZMAYR 1936, nov.syn., and the following synonymies are confirmed: *Amblystomus metallescens* (DEJEAN 1829) = *A. dilatatus* (CHAUDOIR 1846) = *A. majoricensis* SCHAUFUSS 1882. Lectotypes are designated for *Amblystomus levantinus* REITTER 1883. First records of *Amblystomus metallescens* (DEJ.) for Iran and Syria. Confirmed records for Cyprus and Israel. Additionally the median lobe of *A. metallescens* (DEJ.) is figured and distribution data are given.

**K e y w o r d s :** Coleoptera, Carabidae, Harpalini, *Amblystomus*, nomenclature, taxonomy, lectotype designation, new synonymies, distribution data, first or confirmed records, palaeartic region.

### Introduction

In course of preparing identification keys for harpalines from Greece I had to focus my attention also on *Amblystomus levantinus* REITTER 1883, a species mentioned in many works on Carabidae (e.g. REITTER 1900: 143; APFELBECK 1904: 165; JAKOBSON 1907: 389; SCHATZMAYR 1936: 70, 1943: 101; MAGISTRETTI 1965: 264; ALFIERI 1976: 22; JEANNE & ZABALLOS 1986: 124; TRAUTNER & GEIGENMÜLLER 1987: 390; GUÉORGUIEV & GUÉORGUIEV 1995: 210; KRYZHANOVSKIJ et al. 1995: 155; LORENZ 1998: 362; DROVENIK & PEKS 1999: 96; JAEGER & WRASE 2003: 360; SERRANO 2003: 60; VIGNA TAGLIANTI 1993: 41, 2001: 386, 2005: 220; GUÉORGUIEV 2007: 93).

The species was characterized in Reitter's description as being similar to *A. metallescens* (DEJEAN 1829), due to this, and also caused by the fact that nobody (except Kult and Jedlička) investigated the types, it remained a mystery to many carabidologists (In GUÉORGUIEV 2007: l.c., comment is made about the unclear status of this species). I have checked in the past many specimens, identified as *A. levantinus*, but found they belonged to the well-known *A. metallescens* (at least partly). To get clarification about the status of *A. levantinus* I examined the types and found (almost expected) concordance of characteristics, including those of the male genitalia – the mysterious *A. levantinus* REITT. is nothing more than *A. metallescens* (DEJ.). Additionally, the investigation of some synty-

pes of taxa already realized as synonyms of *A. metallescens* confirmed these synonymies. Last but not least I found in the collection of the MNHUB two syntypes of *A. metallescens* (DEJ.), which certified the interpretation of this species by most authors.

*A. levantinus* REITT. was recorded from the whole Italian territory, and as questionable also *A. cephalotes* REITTER 1896, from Sicily. In the past I received from several colleagues material from Sardinia, identified partly as *A. levantinus*, or as *A. cephalotes*. After clarification of the status of *A. levantinus* this taxon is seemingly undescribed, its description will follow in a subsequent paper.

In the following text I give details of my investigations and present some distributional data of *A. metallescens* (DEJ.).

### Material

Material examined is housed in the collections of institutions or in private collections as listed below:

MNHUB .....	Museum für Naturkunde der Humboldt-Universität, Berlin, Germany (J. Frisch, B. Jaeger, M. Uhlig)
NME.....	Naturkundemuseum Erfurt, Erfurt, Germany (M. Hartmann)
MNW .....	Naturhistorisches Museum, Vienna, Austria (H. Schönmann, E. Kirschenhofer)
SMNS.....	Staatliches Museum für Naturkunde, Stuttgart, Germany (W. Schawaller)
TMB.....	Természettudományi Múzeum, Budapest, Hungary (G. Szél)
cBUL.....	Coll. P. Bulirsch, Prague, Czech Republic
cKAŠP .....	Coll. L. Kašpar, Česká Lípa, Czech Republic
cKM .....	Coll. R. Kmeco, Litovel, Czech Republic
cSCHN.....	Coll. P.H. Schnitter, Halle, Germany
cSK .....	Coll. V. Skoupý, Kamenné Žehrovice, Czech Republic
cWR .....	Coll. D.W. Wrase, Berlin, Germany

### Methods

Total body length (BL) is measured from the anterior margin of the right lobe of the clypeus to the apex of the right elytron.

Microsculpture was examined at a magnification of 100×.

Line drawings were prepared by using an ocular grid (15 × 15 squares) attached to a Leica MZ 16 stereobinocular microscope. Dissections were made with standard techniques, median lobes were preserved in Euparal on acetate labels, and pinned beneath the specimens from which they had been removed.

Original labels of type specimens were cited as originally given, and different lines are separated by a forward slash (/).

## Results

### *Amblystomus metallescens* (DEJEAN 1829)

*Amblystomus metallescens* (DEJEAN 1829) (type loc.: "Midi de la France,...Espagne et...Dalmatie")

*Acupalpus metallescens* DEJEAN 1829: 482

*Amblystomus dilatatus* (CHAUDOIR 1846) (type loc.: "Lenkoran")

*Hispalis dilatatus* CHAUDOIR 1846: 188

*Amblystomus majoricensis* SCHAUFUSS 1882: 545 (type loc.: "Ins. Balear. maior...Andraitx")

*Amblystomus levantinus* REITTER 1883: 140 (type loc.: "Corfu"), **nov.syn.**

*Amblystomus levantinus* ssp. *laevistriatus* SCHATZMAYR 1936: 70 (type loc.: Egypt: "Marg, Tura, Massara..., Delta..., Fajum..., Piramidi Ghizeh, Chirdassa, Heluan"), **nov.syn.**

## Type material

### *Acupalpus metallescens* DEJEAN (MNHUB)

Syntypes: 1 ♂, labelled: "52895" (printed on white label); "metalle- / scens Dj./Gall.m.\* (handwritten by Schüppel, black on white label). 1 ♀, labelled: "52895" (printed on white label); "metallescens / n. / Acupalp. met. Dej. / Gall. mer. Dej." (handwritten on white label). Both with labels subsequently added: "Hist.-Coll. (Coleoptera) / Nr. 52895 / *Amblystomus metallescens* / Dej. / Gall. mer. Dejean / Zool. Mus. Berlin" (black print, black margined, on white label). "SYNTYPE" (black print on red label).

### *Hispalis dilatatus* CHAUDOIR (MNHUB)

Syntype: 1 ♀, labelled: "dilatatus Chaud. / Lenkoran Chaud." (handwritten by Chaudoir on white label); "52903" (printed on white label); with labels subsequently added: "Hist.-Coll. (Coleoptera) / Nr. 52903 / *Amblystomus dilatatus*/Chaud. / Lenkoran, Chaud./Zool. Museum Berlin" (black print, black margined on white label). "SYNTYPE" (black print on red label).

### *Amblystomus majoricensis* SCHAUFUSS (MNHUB)

Syntypes: 3 specimens, labelled: "majoricensis / Schauf./Mallorca" 52903" (handwritten by H.W. Schaufuss, black on white label); a label subsequently added: "SYNTYPE" (black print on red label).

### *Amblystomus levantinus* REITTER (TMB)

Lectotype ♂, herewith designated, labelled: "Corfu / Reitter." (black print, black margined on white label), with three labels subsequently added: "coll. Reitter" (black print on white label); "Paratypus 1883 *Amblystomus levantinus* Reitter" (red print, red margined on white label, species name, year and author's name written by an unknown hand), and: "A. *levantinus* Rtt. Det. K. Kult, 1959" (species name and date handwritten, rest printed on white label). Paralectotypes: 2 ♂♂, 2 ♀♀ with the same locality label; ♂♂ with label subsequently added: "*levantinus* Rtrr. det. Jedlička" (species and author's name handwritten, rest printed on white label); 1 ♀ with label subsequently added: "*levantinus* Rtrr. det. Ing. Jedlička" (species and author's name handwritten, rest printed on white label), the second ♀ with label "coll. Reitter" (black print on white label), and with two labels subsequently added: "Holotypus 1883 *Amblystomus levantinus* Reitter" (red print, red margined on white label, species, year and author's name written by an unknown hand), and: "*Amblystomus levantinus* Rtt. Det. K. Kult, 1959" (species name and date handwritten, rest printed on white label). 1 ♀: "Nauplia"

(handwritten by Reitter on white label), and with two labels subsequently added: "levantinus Rtt. Coll. Reitter" (species and author's name handwritten, rest printed on white label), and: "A. levantinus Rtt. Det. K. Kult, 1959" (species name and date handwritten, rest printed on white label). 1 ♂: "Morea / Cumani / Brenske" (black print, black margined on white label), and with three labels subsequently added: "coll. Reitter" (black print on white label); "Paratypus 1883 Amblystomus levantinus Reitter" (red print, red margined on white label, species name, year and author's name written by an unknown hand), and: "A. levantinus Rtt. Det. K. Kult, 1959" (species name and date handwritten, rest printed on white label). 1 ♀: "Süd-Spanien / Algeciras / Simon" (black print, black margined on white label), with three labels subsequently added: "coll. Reitter" (black print on white label); "Paratypus 1883 Amblystomus levantinus Reitter" (red print, red margined on white label, species name, year and author's name written by an unknown hand), and: "A. levantinus Rtt. Det. K. Kult, 1959" (species name and date handwritten, rest printed on white label). 1 ♀: "Andalusia" (handwritten by Reitter on white label), and with two labels subsequently added: "levantinus Rtt. Coll. Reitter" (species and author's name handwritten, rest printed on white label), and: "A. levantinus Rtt. Det. K. Kult, 1959" (species name and date handwritten, rest printed on white label). Additional labels added stating (lectotype): "LECTOTYPE Amblystomus levantinus REITTER, 1883, WRASE design. 2008"; paralectotypes: "PARALECTOTYPE Amblystomus levantinus REITTER, 1883, WRASE design. 2008" (black print on red label).

All specimens with label: "Amblystomus metallescens (DEJEAN, 1829), WRASE det. 2008" (black print on white label).

### Notes about types and synonymy

*Acupalpus metallescens* DEJEAN was founded on several specimens, coming from the "midi de la France,...Espagne et...Dalmatie". In the collections of the MNHUB the Collection Johann Friedrich Schüppel is housed (see HORN et al. 1990: 355, and see also KLUG 1824: XI, on origin of specimens forming the base of old collections in the MNHUB). Dejean on several occasions described also species coming from the Schüppel's collection, and obviously the pinned specimens (the male now glued to card after extraction of the median lobe), representing syntypes, came into the possession of Schüppel within the scope of an exchange. The kind of labeling and the asterix on the label of the first specimen indicate the status of syntypes.

The description of *Hispalis dilatatus* CHAUDOIR based on several specimens (only females as the author underlined) coming from Lenkoran. The syntype mentioned above surely came within the scope of an exchange into a collection now stored in MNHUB. *H. dilatatus* was said, amongst others, to be somewhat larger than *A. metallescens*, with shorter, more enlarged head, with wider and shorter elytra which are more depressed and more distinctly striate.

Schaufuss described his *A. majoricensis* obviously from three specimens (glued to separate cards but on one pin) from Andraitx (Mallorca) now housed in MNHUB, expressing only some general statements that his species is between *A. mauritanicus* and *metallescens* concerning body size, differing from the first by black antennae, and from the latter by distinct internal elytral striation.

Reitter's description of *A. levantinus* was based on several specimens (exact number not given) from the ".jonischen Inseln, Morea,.... Andalusien". The types identified by their labels: "Corfu" (Kerkyra, an Ionian island); "Morea, Cumani" (Morea is the old name for the Peloponnesos, I have been unable to geographically locate Cumani); "Nauplia" (today Nafplio, on the Peloponnesos); "Andalusia", and "Süd-Spanien, Algeciras", respectively, were glued to identical cards (with exception of the specimen from Algeci-

ras, which has a different type of card), and were pinned with the same type of short white pins. Some of them (see above) bear subsequently added labels designating one specimen as holotype, and others as paratypes, respectively (as usual in many type specimens in TMB but this labeling has no relevance, as all specimens have had the status of syntypes). I re-prepared almost all to get to know the sex (due to the kind of preparation it was not always recognizable) and made a genital slide from all males (and added the authentic old cards to the specimens). It seemed to me useful to designate a lectotype (total body length 3.5 mm, measured from the anterior margin of the right lobe of the clypeus to the apex of the right elytron) for having an unique bearer of the name.

In the Reitter's collection are some more specimens under *A. levantinus*, but evidentially not belonging into the type series, according to their labels (though the specimen from "Attica" was subsequently labelled with a paratype-label).

It deals with: 1♂, labelled: "Margelan. [Margilan, Uzbekistan] Reitter."; "levantinus Coll. Reitter"; "A. levantinus Rtt. Det. K. Kult, 1959". 1♂: "Calabrien. Brindisi. Reitter, Leder"; "levantinus Coll. Reitter"; "A. levantinus Rtt. Det. K. Kult, 1959". 1♀: "Caucasus, Araxesthal. Leder. Reitter."; "levantinus Coll. Reitter"; "A. levantinus Rtt. Det. K. Kult, 1959". 1♀: "Graecia coll. Lichtn."; "levantinus Rtt. det. ING. JEDLIČKA". 1♀: "Attika Reitter."; "Coll. Reitter", "Paratypus 1883 *Amblystomus levantinus* Reitter"; "A. levantinus Rtt. Det. K. Kult, 1959". 1♂, 2♀♀: "Misserghin [Algeria]"; "levantinus Coll. Reitter"; "A. levantinus Rtt. Det. K. Kult, 1959". 2♀♀: "Oran, Sidi-bel-Abbes"; "levantinus Coll. Reitter"; "A. levantinus Rtt. Det. K. Kult, 1959". 1♀: "Aulie [Dzambul, Kazakhstan]"; "levantinus Coll. Reitter"; "A. levantinus Rtt. Det. K. Kult, 1959".

All specimens belong to *A. metallescens* (DEJ.), with exception of the specimen from "Aulie" which is *A. niger* (HEER 1841).

These specimens later added enabled REITTER (1900) to widen the range of his *A. levantinus* as occurring from the Mediterranean area to Margelan.

Reitter characterized *A. levantinus* as being similar to *A. metallescens* (DEJ.), somewhat more robust, and distinctly larger (4 mm), with more slender antennae, deeply impressed pronotal midline, more distinct elytral striae and intervals with a regular row of punctures. As a separating character Reitter mentioned the transverse reticulation of the upper surface in *A. levantinus*, while *A. metallescens* should have round meshes.

The construction of the median lobe including its internal sac of the male syntype of *A. metallescens* (Dej.) is figured in Fig. 3 and confirms the interpretation of this species by most authors (e.g. see JEANNEL, 1942: 729). The investigation of the type series of the different nominal taxa mentioned above confirmed, after having seen a large amount of material of *A. metallescens* from its whole range, taking into account the construction of the median lobe (Fig. 1-3), the body size as well as the variability of external characters, that all names are based on specimens of one taxon. The statement of Reitter that *A. metallescens* would have round meshes on the upper surface, must have been an error in observation (except on head, meshes on pronotum and elytra are transverse, too), and measurements in the type series of *A. levantinus* resulted in a body size less than Reitter indicated, the largest specimen (the female from "Morea, Cumani") measures 3.8 mm. A weak suspicion also remains that Reitter, although a good expert of Carabidae, has held *A. niger* for *A. metallescens* and came in this manner to a misjudgment. For this speaks his characterisation of *A. metallescens* which better fits *A. niger*.

The description of *A. levantinus* ssp. *laevistriatus* SCHATZMAYR 1936, from Egypt, corresponds completely with *A. metallescens* (DEJ.), and I believe that is is fully justified to place Schatzmayr's name in synonymy, further, as I have seen a male of *A. metallescens* from Fayum Oasis, lake Qarun (a locality mentioned also by Schatzmayr in his description), which differs in no respects from European specimens (other localities from Egypt see below).

It may be noted that the wrong reference of *A. metallescens* (DEJ.) for the former Czechoslovakia (KULT 1947, PULPÁN & HŮRKA 1984) was most probably caused by the fact that Kult, after investigation of the type material of *A. levantinus* REITT. was misled in interpretation of the Slovakian specimens, believing that it related to *A. metallescens* (DEJ.) whereas in truth they belong to *A. niger* (HEER).

### Recognition

A medium-sized amblystomine (2.9-4 mm), dark piceous to blackish, often with very weak greenish or bluish tinge, antennae completely dark, palpi darkened, legs with femora dark and tibiae and tarsi somewhat lightened. Head wide with eyes moderately large and moderately prominent, clypeus shallow, weakly asymmetric, right lobe somewhat more protruding than left. Pronotum strongly transverse, posterior angles almost entirely rounded. Elytra wide and short, internal striae (1 to mostly 4-5) distinct, external striae becoming shallow and indistinct, often only indicated. Intervals flat with sparse fine punctures at middle, somewhat lined. Upper surface strongly reticulate, on head meshes isodiametric, on pronotum strongly, and on elytra moderately transverse. Median lobe elongate, toward apex acuminate, apical lamella (in lateral view) somewhat blunt and moderately deflexed (Figs 1-3), internal sac centrally with about nine to 12 smaller to large spines, rotated to each other, one single large to medium-sized spine before apex, internal sac toward base forming characteristic figures by overlapping of microtrichiae.

### Intraspecific and geographical variability

External characters can intraspecifically considerably vary, especially striation of elytra, (which can be with internal striae distinctly engraved to indistinct, fine and shallow), coloration (upper surface from brownish piceus without any metallic tinge to black with very weak metallic lustre, legs lighter or darker) and body size. This large variability is surely the reason for the several nominal taxa, mentioned above. Geographical variability not defined.

### Other material examined

*A. metallescens* (DEJ.) has a wide distribution, it ranges from the whole Mediterranean area, southern Central Europe, the Balkans, Caucasus and Asia Minor to Near East, Middle Asia and Afghanistan, as already documented in JAEGER & WRASE 2003: 360. In the following some findings were noted which give a still better knowledge of the distribution of the species.

Beside the material mentioned above 348 specimens were investigated from:

- France: "Gall. mer." (4 spcsm., MNHUB). - Corse: Corse-du-Sud: "Ajaccio/Corse" (20 spcsm., MNHUB, cWR). - Haute-Corse: Aleria, 27.IV.1905, coll. O. Leonhard (9 spcsm., MNHUB). - Languedoc-Roussillon: Gard: "Camargue/D<sup>r</sup> A. Chobaut" (3 spcsm., MNHUB). Dions, NW Nîmes, bank of Gardon river, 19.V.1994, M. Schülke & B. Grünberg leg. (1♂, cWR). - Hérault: Etang de Vendres, 19.I.1963, C. Jeanne leg. (1♂, 3♀, cWR).
- Italy: Lazio: Roma: Maccarese, P. Luigioni leg. (1♂, 2♀, MNHUB). Palo env., R. Montali leg. (1♂, MNHUB). - Tarent: Puglie, Mar Piccolo, 28.XI.1976, ex coll. F. Battoni (1♂, 3♀, cWR). - Sardinia: Oristano: Cabras, 23.IV.1890 (2♂♂, MNHUB).
- Spain: "Spanien"; "Coll. Thieme" (3 spcsm., MNHUB). "Hispania" (1♀, MNHUB). - Andalucía: Cádiz: Palmones, 29.V.1991, Wrase leg. (1♀, cWR). Rio Guadalquivir, Trebuchena NE Sanlúcar, 19.IV.2007, W. Ziegler leg. (1♂, 3♀, cWR). - Málaga: "Malaga" (1♂, MNHUB). - Islas Baleares: "Balearen/Dr. Will." (5 spcsm., MNHUB). - Castilla-La Mancha: Toledo: Laguna de Tirez, N Villafranca, 24.V.1991, Wrase leg. (4♂♂, 1♀, cWR). Laguna de Lillo, 16.VI.1991, Wrase leg. (1♀, cWR). Quero, saline place, 8.III.1999, Wrase leg. (1♂, cWR).
- Morocco: Kenitra: Moulay Bouselham, 21.-22.V.1995, P. Bulirsch leg. (1♂, 1♀, cBUL, cWR). - Rabat: Boulhaut, IV 1928, Antoine leg. (2 spcsm., MNHUB). - Tanger: 2.5 km SE Larache, S Oued Loukos riv., 35°10.458'N/006°06.685'W (brackish pastures/ponds), 1.III.2004, Wrase leg. (1♀, cWR). - Tetouan: Sebta-Fnideq, 9.V.1995, Kv. Resl leg. (1♂, 1♀, cWR).
- Algeria: Annaba: "Bone" [Annaba] IV 86 (1 spcm., MNHUB). - Bou Saada: Banion, 29.IV.1987, G. Sama leg. (1♂, 1♀, cWR).
- Egypt: 40 km S Alexandria, 19.I. 1994, W.G. Ullrich leg. (1♀, cWR). N.W. Egypt, W. Desert, Oasis Bahariya, light trap, 30.IV.1996, W.G. Ullrich leg. (2♀, cWR). Fayum Oasis, lake Qarun, under halophytes in saline habitat, 9.II.1996, W.G. Ullrich leg. (1♂, cWR).
- Austria: Burgenland: Jois, IV 1963, Baderle leg. (1♀, cWR).
- Albania: Durrës: "Durres", 1932, Bischoff leg. (1♀, MNHUB). - Vlora: "Avlona", v. Oertzen leg. (1 spcm., MNHUB).
- Greece: "Graecia" or "Griechenland" (7 spcsm., MNHUB); "Griechenland Reitter" (6 spcsm., MNHUB, cWR). "Morea, v. Oertzen" (2♀, MNHUB). - Attiki: "Attika" (11 spcsm., MNHUB). - Dodekanissa: Ródos, N Apolakkia, water reservoir, 90 m, 36°06'49"N 27°47'29"E, 09.IV.2007, Bahr, Bayer, Brunner, Winkelmann leg. (1♂, cWR). - Kriti: "Kreta", 1942, Zimmermann leg." (7 spcsm., MNHUB). - Hanion: "Chaniá" [Haniá], 31.III.1925, A. Schulz leg. (5 spcsm., MNHUB). Palaeohóra, 3.-5.VI.1942, K. Zimmermann leg. (25 spcsm., MNHUB, cWR). - Rethimno: Panormo, 15.VII.2007, T. Schmidt leg. (1♀, cSCHM). - Ipirus: Árta: Árta env., 20 km W Árta, 7.VI.2005, L. Kašpar leg. (1♀, cKASP); 14.V.2006 (1♂, cKASP). Árta env., Strongili, salt wetlands at Rodia lagoon, 10.VI.2008, R. Kmeco leg. (3♂♂, 1♀, cKM). - Préveza: Ammoudia, 40 km N Préveza, swampy area, V 2002, T. Lebenbauer leg. (4♂♂, 7♀, cWR). - Macedonia: "Vardar T. [Thessaloniki?]" Schatzmayr 09" (1♂, 3♀, MNHUB). - Nissia Ioniou: Kérkira: "Corfu Paganetti" (2 spcsm., MNHUB); "Corfu"; "J. Sahlberg" (2 spcsm., MNHUB). - Zákinthos: "Insel Zante", IV 1909, coll. O. Leonhard (1♂, MNHUB). - Peloponnessus: Ahaía: 30 km SW Pátra, Metohi salt land, at light, 9.VI.2003, R. Kmeco leg. (1♂, cKM). Metohi 30 km W Pátra, 10.III.2003, V. Skoupý leg. (1♂, cSK). Kalógria lagoon, Pinus pinea, 6.X.2005, U. Bense leg. (1♀, SMNS). - Stereá Ellas: Etolá-Akarnanía: env. Neohóri vill., SW Etolíkó, saline soil, 27./28.V.1997, P. Bulirsch leg. (1♀, cBUL); 27.V.1997, S. Benedikt leg. (1♂, 2♀, cBUL).
- Montenegro: Herceg Novi: "Castelnuovo [Herceg Novi] Hummler", 1 spcm. with date: [18]95" (2 spcsm., MNHUB).
- Bulgaria: Burgas: Nesebar, 1.VI.1964, K. Ermisch leg. (1♀, MNHUB); same data but: 2.VI. 1964 (1♀, MNHUB); 20.VI.-6.VII.1965 (1♀, MNHUB). Pomorie, saline soil, 25.V.1984, Wrase leg. (28 spcsm., MNHUB, cWR); B. Jaeger leg. (25 spcsm., MNHUB); 9./10.V.1985, Wrase leg. (1♂, cWR). 3.-5.VI.1982, H. Wendt leg. (1♀, MNHUB). - Razgrad: "Tschepe" [most probably: Tschepe Bair, SE Bulgaria, Danube Plain, Razgrad District], 20.-30.IX.1969, collector unknown (1♀, MNHUB).
- Turkey: "Klein-Asien, Taurus" (2 spcsm., MNHUB). - Adana: "Adana, Taurus" (1♀, cWR); Adana-Balcali (1 spcm., MNHUB). - Adıyaman: Eskikáhta, 6./7.VI.1994, M. Šarovec leg. (1♀, cWR). - Antalya: Bey Dağları, foothills, Kemer env., 0-400 m, 29.VI.2003, P. Bulirsch leg. (2♂♂, cBUL,

- cWR). - Aydın: Söke env. Miletos, M. Beneš leg. (1 ♂, 1 ♀, cWR). E Antalya, Belek, hotel Cesars, beach and adjacencies, 28.IV.-5.V.2003, A. Skale leg. (1 ♂, NME). - Hatay: Altinozü nr. Hatay, 400 m, 22.IV.1992, R. Borovec leg. (1 ♀, cWR).
- Republic Cyprus: Paphos: Platres, 12.-19.V.2000, O. Blochwitz leg. (3 ♂ ♂, 9 ♀ ♀, cSCHN, cWR). Ezousa river bank at Kourdaka, 30.IV.2004, W. Apfel leg. (1 ♂, NME).
- Azerbaijan: Qaradağ: Qobustan env. /Baku, 17.V.2007, K. Orszulik leg. (1 ♂, cWR).
- Iraq: "Irak" (1 ♀, cSK). Bagdad: Abu-Ghraib, on ground, 30.I.1980, G. Doberitz leg. (4 spcms., MNHUB); Abu Chreib [Ghraib], 26.IV.1980, G. Doberitz leg. (1 ♀, cWR). Bagdad env., IV 1980, G. Doberitz leg. (3 spcms., MNHUB). Bakuba, 25 km NE Bagdad, 23.V.1963, Kasy & Vartian leg. (58 spcms., NMW, cWR). - Diwala: Kurdistan, Khormal [Wadi], 700 m, 11.V.1976, J. Macek leg. (1 ♂, cWR).
- Iran: Tehran: Karaj, University of Agriculture, 1360 m, 35.47.97N/51.00.25E, 25.V.8.VI.2008, HF, QDL, D. Frenzel leg. (1 ♂, NME).
- Israel: Haifa: coastal area 3 km W Zikhron Ya'akov (edges of fish ponds, brackish water), 3.V.2006, Wrase leg. (1 ♂, 1 ♀, cWR).
- Syria: Al Lādhiqīah: 30 km S Al Lādhiqīah, Idlib env., 31.V.2002, V. Skoupý leg. ("Latakia", 2 ♂ ♂, 2 ♀ ♀, cSK, cWR).
- Uzbekistan: Sirdarvo: Syr Darja riv., Gulistan env., 14.VII.1999, S. Zonstein leg. (2 ♀ ♀, cWR).
- Turkmenistan: Ahal: 30 km W Ashgabat, Karakum-Canal, 23.IV.1993, R. Predel leg. (1 ♀, cWR). Bakharden Cave env. [about 107 km SW Ashgabat], dry slope, 10.V.1989, U. Heinig leg. (1 ♂, cWR).

Not yet recorded from Iran and Syria in JAEGER & WRASE 2003: 360, but its finding was expected as occurring in adjacent countries. New records for Iran and Syria. Confirmation for Cyprus and Israel, as all records of *A. levantinus* REITT. in JAEGER & WRASE 2003, based on literature sources.

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### Zusammenfassung

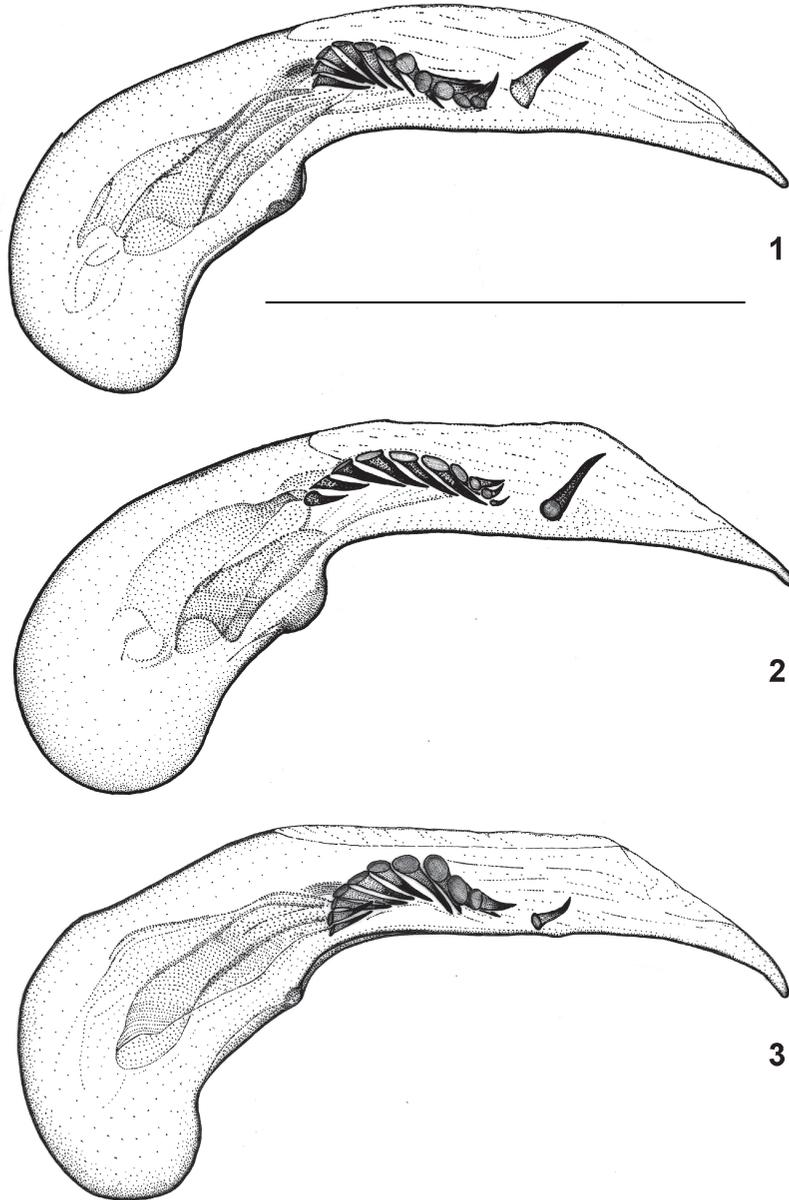
Nach Untersuchung von Typusexemplaren einiger nomineller Taxa werden folgende Synonymien vorgeschlagen: *Amblystomus metallescens* (DEJEAN 1829) = *A. levantinus* REITTER 1883, nov.syn. = *A. levantinus* ssp. *laevistriatus* SCHATZMAYR 1936, nov.syn., weiterhin werden folgende Synonymien bestätigt: *Amblystomus metallescens* (DEJEAN 1829) = *A. dilatatus* (CHAUDOIR 1846) = *A. majoricensis* SCHAUFUSS 1882. Lektotypen werden designiert für *Amblystomus levantinus* REITTER 1883 und der Medianlobus von *A. metallescens* (DEJ.) wird abgebildet. Neben ersten Nachweisen von *Amblystomus metallescens* (DEJ.) für den Iran und Syrien und bestätigten Nachweisen für Zypern und Israel werden weitere Verbreitungsangaben anhand des geprüften Materials gegeben.

## References

- ALFIERI A. (1976): The Coleoptera of Egypt. — Mémoires de la Société Entomologique d'Égypte 5: i-xiii, 1-361.
- APFELBECK V. (1904): Die Käfer der Balkanhalbinsel, mit besonderer Berücksichtigung Klein-Asiens und der Insel Kreta. 1. Band. Familienreihe Caraboidea. — Berlin: R. Friedländer und Sohn, ix + 422 pp.
- CHAUDOIR M. DE (1846): Carabiques. Pp. 47-209. — In: CHAUDOIR M. DE & H. HOCHHUTH, Énumération des carabiques et hydrocanthares recueillis pendant un voyage au Caucase et dans les provinces transcaucasiennes par Baron M. de Chaudoir et le Baron A. de Gotsch. Kiew: J. Wallner, 268 pp.
- DEJEAN P.F.M.A. (1829): Species général des coléoptères, de la collection de M. le Comte Dejean. Tome quatrième. — Paris: Méquignon-Marvis, vii + 520 pp.
- DROVENIK B. & H. PEKS (1999): Catalogus Faunae. Carabiden der Balkanländer. Coleoptera Carabidae. — Schwanfelder Coleopterologische Mitteilungen, Neuauflage, Sonderheft 1: 1-123.
- GUÉORGUIEV V.B. & B.V. GUÉORGUIEV (1995): Catalogue of the ground-beetles of Bulgaria (Coleoptera: Carabidae). — Sofia - Moscow: Pensoft Publishers, 279 pp.
- GUÉORGUIEV B.V. (2007): Annotated catalogue of the carabid beetles of Albania (Coleoptera: Carabidae). — Sofia - Moscow: Pensoft Publishers, 243 pp.
- HEER O. (1841): Fasciculus tertius et ultimus. Pp. 361-652. — In: Fauna Coleopterorum Helvetica. Pars I. Turici: Orellii, Fuesslini & Sociorum, xii + 652 pp.
- HORN W., KAHLE I., FRIESE F. & R. GAEDICKE (1990): Collectiones entomologicae. Ein Kompendium über den Verbleib entomologischer Sammlungen der Welt bis 1960. Teil II: L bis Z. — Akademie der Landwirtschaftswissenschaften der Deutschen Demokratischen Republik, pp. 223-465 + 38 tabl. + 125 figs.
- JAEGER B. & D.W. WRASE (2003): Amblystomina, p. 360. — In: LÖBL I. & A. SMETANA (eds), Catalogue of Palaearctic Coleoptera, Vol. 1. Stenstrup: Apollo Books, 819 pp.
- JAKOBSON G.G. (1907): Fasc. 5, pp. 321-400. — In: Zhuki Rossi i Zapadnoi Evropy. Sanct-Petersburg: A.F. Devrien, 1024 pp. + lxxxiii pl.
- JEANNE C. & J.P. ZABALLOS (1986): Catalogue des coléoptères carabiques de la Péninsule Ibérique. — Supplément au Bulletin de la Société Linnéenne de Bordeaux: 1-200.
- JEANNEL R. (1942): Coléoptères carabiques. Deuxième partie. Faune de France 40. — Paris: Librairie de la Faculté des Sciences, 572-1173.
- KRYZHANOVSKIJ O.L., BELOUSOV I.A., KABAK I.I., KATAEV B.M., MAKAROV K.V. & V.G. SHILENKOV (1995): A checklist of the ground-beetles of Russia and adjacent lands (Insecta, Coleoptera, Carabidae). — Sofia-Moscow: Pensoft Series Faunistica 3, 271 pp.
- KLUG F. (1824): Entomologische Monographien. — Berlin, G. Reimer: v-xxiv + 242 pp. + 10 tabl.
- KULT K. (1947): Klíč k určování brouků čeledi Carabidae Československé republiky. — Entomologické příručky, 20. Československá společnost entomologička, Praha: 199 pp.
- LORENZ W. (1998): Systematic List of extant ground beetles of the world (Insecta Coleoptera "Geodephaga": Trachypachidae and Carabidae incl. Paussinae, Cicindelinae, Rhysodinae. First edition. — Tutzing: Selbstverlag, 502 pp.
- MAGISTRETTI M. (1965): Fauna d'Italia, 8. Coleoptera: Cicindelidae, Carabidae. — Catalogo topografico: I-XV. — Bologna: Edizioni Calderini, 512 pp.
- PULPÁN J. & K. HŮRKA (1984): Verzeichnis der tschechoslovakischen Laufkäfer /Coleoptera-Carabidae/. — Zpravodaj Západočeské Pobočky Československé Společnosti Entomologické při ČSAV v Plzni, Supplementum: 1-28.
- REITTER E. (1883): Revision der europäischen *Amblystomus*-Arten. — Wiener Entomologische Zeitung 2: 139-143.

- REITTER E. (1900): Bestimmung-Tabelle der europäischen Coleopteren. XLI. Heft. Enthaltend Carabidae. Abtheilung: Harpalini u. Licinini (Sonderabdruck aus dem XXXVIII. Bande der Verhandlungen des naturforschenden Vereins in Brünn [1899]). — Brünn: Verlag des Verfassers, 1-155.
- SCHATZMAYR A. (1936): Risultati scientifici della spedizione entomologica di S.A.S. il Principe Alessandro della Torre e Tasso in Egitto e nella penisola del Sinai. XII. Catalogo ragionato dei Carabidi finora noti d'Egitto e del Sinai. — Pubblicazioni del Museo Entomologico "Pietro Rossi", Duino **1**: 1-114.
- SCHATZMAYR A. (1943): Coleotteri raccolti dal Capitano Leonido Boldori in Albania. — Atti della Società Italiana di Scienze Naturali e del Museo Civico di Storia Naturale in Milano **82**: 93-140.
- SCHAUFUSS L.W. (1882): Zoologische Ergebnisse von Excursionen auf den Balearen. III. (Addenda und Fortsetzung). — *Nunquam Otiosus* **3** [1879-1890]: 527-552.
- SERRANO J. (2003): Catálogo de los Carabidae (Coleoptera) de la Península Ibérica — Monografías S.E.A. **9**: 1-130.
- TRAUTNER J. & K. GEIGENMÜLLER (1987): Sandlaufkäfer. Laufkäfer. Illustrierter Schlüssel zu den Cicindeliden und Carabiden Europas. — Aichtal: Verlag Josef Margraf, 488 pp.
- VIGNA TAGLIANTI A. (1993): Coleoptera Archostemata, Adephaga I (Carabidae). — In: MINELLI A., RUFFO S. & S. LA POSTA (eds), Checklist delle specie della fauna italiana, 44. Bologna: Edizioni Calderini, 51 pp.
- VIGNA TAGLIANTI A. (2001): I Carabidi delle isole circumsarde (Coleoptera, Carabidae). — *Annali del Museo civico di Storia naturale "G. Doria"*, Genova **93** (2000): 305-428.
- VIGNA TAGLIANTI A. (2005): Lista dei corotipi e delle specie di carabidi della fauna italiana. Pp. 186-225. — In: BRANDMAYR P., ZETTO T., PIZZOLOTTO R., CASALE, A. & A. VIGNA TAGLIANTI, I Coleotteri Carabidi per la valutazione ambientale e la concervazione della biodiversità. Manuale operativo. Agenzia per la protezione dell'ambiente e per i servizi tecnici. Manuali e Linee Guida 34: 225 pp.

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**Figs 1-3:** *Amblystomus metallescens* (DEJ.), median lobe, lateral view. (1) Lectotype *A. levantinus* REITT. (2) Bulgaria, Pomorie. (3) Syntype *A. metallescens* DEJ. Scale bar: 0.48 mm.

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