New and additional distribution data of the genus *Acupalpus* LATREILLE 1829 from the Middle East and adjacent areas
(Coleoptera, Carabidae, Harpalini, Stenolophina)

B. JAEGER

**Abstract:** Based on study of 700 additional specimens from the Middle East and adjacent areas the second supplement on the *Acupalpus* fauna of this region is presented. The following new and additional distribution data are provided:


**Keywords:** Carabidae, Harpalini, Stenolophina, *Acupalpus*, new records, Middle East, Afghanistan, Pakistan, India.

**Introduction**

During the past 150 years various authors such as SCHAUM (1858), BAUDI DI SELVE (1864), PIOCHARD DE LA BRULERIE (1875), REITTER (1884, 1900), BODEMEYER (1900), APFELBECK (1904), SAHLBERG (1913), BODEMEYER (1927), BODENHEIMER (1932, 1937), JEDLICKA (1955, 1961, 1962, 1967), MANDL (1967), ALI (1966, 1974), ALFIERI (1976), JEANNE (1996), JAEGGER (1987, 1988, 1989), KATAEV (1996), CASALE & VIGNATAGLIANTI (1999), AUSTIN et. al. (2008) and WRASE (2009) provided records of *Acupalpus* species from the Middle East and Afghanistan. The most comprehensive contribution on the *Acupalpus* fauna of this region was presented by JAEGGER (1992) supplemented by JAEGGER (1999). Considering the latter papers, 14 taxa of the subgenus *Ancyostricia* have so far been recorded from the Middle East, excluding *A. gracilis* BOHEMAN 1848, an Afrotropical species reported from
Yemen. Due to biogeographical and ecological reasons it is not surprising that within the Middle East the number of species decreases markedly from north to south as well as from west to east. In the latter direction the number of species diminishes from 13 reported from Turkey, to 7 from Iran and only 4 from Afghanistan. No species of the subgenera *Acupalpus* and *Ancylostria* has been so far recorded from the adjacent area of Pakistan, though it is suspected that at least some of the four species known from Afghanistan also occur in western or northern Pakistan west of the Indus valley.

New and older collections from the Middle East and adjacent areas that became available since JAEGER (1999) comprise about 700 additional *Acupalpus* specimens, including various interesting finds, amongst them new province records, and first country records for Turkey, Lebanon, Syria, Iran, Pakistan and India (Jammu and Kashmir). The latter records confirmed the aforementioned suggestion that some species of the subgenus *Acupalpus* occur in the southern West Palaearctic east of Iran and Afghanistan.

The new and additional records from the Middle East and adjacent areas are presented in the following contribution.

**Material and Methods**

The examined material is deposited in the following public institutions and private collections

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Results

Acupalpus (Acupalpus) elegans (DEJEAN 1829)

General distribution: Canary Islands, Mediterranean region, West, Central and East Europe, Transcaucasia, Middle East, Middle Asia and West Siberia.


Since JAEGGER (1999) the following additional material, including first records for Syria, for the Turkish province Samsun and the Iranian provinces Tehran and Yasd, has been examined.

Examined material:

Egypt: Cairo: Dashshur ca. 23 km S Cairo, 29°40'00"N, 31°14'30"E, light trap, V. 1996, Ullrich (1 – cWRA); W Desert Oasis Bahariya, IV. 1996, Ullrich (1 – cWRA).

Israel: Haifa District: 22 km S Haifa, Strand, V. 1996, Hauser (7 – SMNS, cJAE); coastal area 3 km W Zikhron Ya'akov (edges of fish pond brackish water), V. 2006, Wrase (13 – cWRA, cJAE).


*Acupalpus (Acupalpus) exiguus* DEJEAN 1829

**General distribution:** Kazhakstan, West Siberia, Transcaucasia, Europe (from central and southern Russia in the east to France in the west, and from southern Fennoscandia in the north to Italy and the Balkan Peninsula in the south and southeast).

The species has not yet been recorded from the Middle East though an occurrence in Turkey and Iran could be expected due to known records from Azerbaijan (Lenkoran), Georgia and the Balkan Peninsula. The species is for the first time recorded for Turkey.

**Examined material:**

**Turkey:** Erzincan: Refahiye E, Sakaltutan Geçi di W, Stausee Schlamufer, 1936 m, N 39°52.682' E 39°01.705, VIII. 2002, Schnitter (1 – cSCHN).

*Acupalpus (Acupalpus) flaviceps* (MOTSCHULSKY 1850)

**General distribution:** According to KATAEV (1996: 128) the species occurs from Mongolia across northwest China (Inner Mongolia and Xinjiang), Middle Asia, to southern Russia (Astrakhan Province) and Middle East.

The record of the species from East Nepal (JEDLIČKA & CHUJO 1966: 537) is based, without doubt, on a misidentification.


Since JAEGER (1999) the following material, including one additional record from Iran and confirmed former records from Afghanistan, has been examined from the Middle East, as well as from northwestern China from which only few localities were known.

**Examined material:**


**Afghanistan:** Bala Murgab, 470 m, Prov. Herat, VI. 1964, Jakes (1 – NMP); Kabul, Klapperich (3 – MNHUB); Kabul and Kabul env., 1740 m, V. and IX. 1952, Klapperich (15 – NMP); Kabul W, VIII. 1963, Kasy & Vartian (6 – cWRA); Khurd-Kabul, Kabul W, VIII. 1963, Kasy & Vartian (7 – cWRA); Khurd-Kabul, SO Kabul, 1400 m and 1900 m, IV., VI., and VII. 1965, Kasy & Vartian (169 – NHMW, NMP, cJAE); Churd-Kabul, 2000 m, III. 1963 (3 – MMB).

**Iran:** Sistan and Baluchestan: Hirmand, IV. 1971, Radjabi (5 – HMIM).

*Acupalpus (Acupalpus) flavicollis* (STURM 1825)

**General distribution:** Kazhakstan, West Siberia, Turkey, Europe (from the Ural in the east to France and northern Spain in the west, and from southern Fennoscandia in the north to Italy and the Balkan Peninsula in the south and southeast).

**Distribution in Middle East:** So far only known from few localities in northwestern Turkey (BODEMEYER 1900: 105, APFELBECK 1904: 205, JAEGER 1992: 225, 1999: 958). One additional record from the same region as well as one new one from northeastern Turkey can be added.
Examined material:

Acupalpus (Ancylostria) interstitialis REITTER 1884
General distribution: Transcaucasia, Turkey, Europe (from southern Russia in the east to France in the west, and from Estonia and Central Europe in the north to Italy and the Balkan Peninsula in the south and southeast).
Distribution in Middle East: So far only known from Turkey (BODEMEYER 1900: 105, JAEGGER 1992: 225, 1999: 959).
The species can be recorded from three additional Turkish provinces.
Examined material:

Acupalpus (Acupalpus) jaegeri KATAEV 1996
General distribution: Irak and Iran west of the Zagros Mountains.
In addition to former records from Iran and Iraq (KATAEV 1996: 127, JAEGGER 1999: 959) the following specimens have been studied.
Examined material:
Iraq: "Mesopotamia, Assur und Mösöl" (1 – MNHUB).

Acupalpus (Acupalpus) luteatus (DUFTSCHMID 1812)
General distribution: Mediterranean Region, West, Central and East Europe, Middle East, Transcaucasia, Middle Asia.
The following additional material, including first records for the Turkish provinces Elâziğ, Kayseri and Muğla, has been examined.
Examined material:
Iran: Gilan: Rudbar, VI. 2009, Skoupý (12 – cSKO, cJAE).

Acupalpus (Acupalpus) maculatus (SCHAUM 1960)
General distribution: Canary Islands, Mediterranean Region, West, Central and East Europe, Transcaucasia, Middle East, Middle Asia.
Distribution in Middle East: So far recorded from Cyprus (JAEGGER
The following new material, including first records for Lebanon, Pakistan, India, and for the Iranian province Kerman, and for the Turkish provinces Çanakkale, Elâziğ, Erzincan, Kars, Samsun and Uşak, has been examined. The finds from northwest India (Jammu and Kashmir) represent the most eastern records of *A. maculatus* in the southern West Palaearctic.

**Examined material:**

**Cyprus:** Ezousa - Fluß Ufer, bei Kourdaka, IV. 2004, Apfel (1 – cAPF).


**Lebanon:** Bekaa: Ammiq, Reserved Area, Feuchtgebiet, 870 m, 33°43’42”N, 35°47’09”E, V. 2006, Frenzel & Weipert (15 – cWEIP, cJAE, NME).


**Afghanistan:** Bala Murghab, 470 m, (23), VI. 1964, Jakeš (1 atypical female – MMB).
Pakistan: Khyber Pakhtunkhwa Province (North-West Frontier Province): Kagân-Tal, Naran, 2400-2700 m, VII. 1981, Heinz (5 – MNHUB, cJAE); Hazara, Kaghan, 2150 m, VI. 1983, Besuchet & Löbl (2 – MHNG, cJAE); Swat, Madyan, 1400 m, V. 1983, Besuchet & Löbl (1 – MHNG); Swat, s/Utrot, 2500-2600 m, V. 1983, Besuchet & Löbl (1 – MHNG).


It should be noted that the specimens from the Swat and Kaghan Valley in northern Pakistan (see above) differ from typical members of A. maculatus. The Pakistani specimens at a first glance remind one of Acupalpus brunnipes, because five of them are uniformly blackish to dark blackish brown, having only the mouthparts, pronotal and elytral margins narrowly, and first elytral interval dark reddish brown. The remaining specimens have at least the outer elytral intervals vaguely lighter, and in one specimen indications of a small dark brown spot in front of each elytron. In typical maculatus specimens the pronotal margins are more widedly reddish yellow and the elytra are reddish yellow with an expanded dark central macula, which typically extends along intervals 5-6 to elytral base, so that a distinct oval reddish or yellowish patch remain at both sides of suture. Rarely the pronotum is almost black, and very rarely the elytra are completely dark and immaculate in single specimens occurring within populations of typically coloured specimens. In addition to these colour differences the eyes are somewhat less prominent; the pronotal basal impressions are more distinctly punctate; the microsculpture at apical half of the head is more isodiametric, instead of more tranversely stretched, and on pronotum and elytral intervals the meshes are generally somewhat coarser and more distinct. However, in single specimens of the Pakistani populations as well as in those from other places the mentioned differences are less clear.

A comparison of the external shape of the median lobe of aedeagus and its internal sac revealed no difference between the Pakistani specimens and those from other areas. The population from northern Pakistan is here treated as an intraspecific geographical form without formal taxonomic rank.

Acupalpus (Acupalpus) meridianus (Linnaeus 1761)

General distribution: Middle and West Siberia, Kyrgyzstan, Kazakhstan, Transcaucasia, Middle East, Europe (from central Russia in the east to France in the west and northern Spain in the southwest, and from southern Fennoscandia in the north to Italy and the Balkan Peninsula in the south and southeast.

Distribution in Middle East: So far recorded from Iran (Bodeleyer 1927: 39) and Turkey (Bodeleyer 1900: 105, Jedlicka 1962: 66, Jäger 1992: 226, 1999: 961).

The following additional material, including first records for the Turkish provinces Antalya, Kars, Niğde, Ordu and Tokat has been examined.

Examined material:

Acupalpus (Ancylostria) morulus REITTER 1884


The following additional material from Turkey has been examined.

Acupalpus (Acupalpus) notatus MULSANT & REY 1861

General distribution: Madeira, Canary Islands, Mediterranean region, Crimea, southern Russia and "Caucasus".

Distribution in Middle East: So far reliable records are only known from Turkey (JAEGER 1988: 22, 1992: 226, 1999: 961).

JEDLIČKA (1967: 73) reported the species also from Bala Murghab in north Afghanistan. This record has been omitted in my former contributions on the Middle East (JAEGER 1992:226, 1999: 961) as well as in the Palaeartic Catalogue (JAEGER & KATAEV 2003: 398). The single specimen examined by me most likely represents an atypical coloured female of A. maculatus.

The following additional material from Turkey, including first records for the provinces Kastamonu, Muğla and Samsun, has been examined.

Examined material:


Acupalpus (Acupalpus) paludicola REITTER 1884

General distribution: Italy, Balkan Peninsula, Middle East, Transcaucasia.


The following additional material from Israel and Turkey, including first records for the Turkish provinces Ankara and Sinop, have been examined.
Examined material:


Acupalpus (Acupalpus) parvulus (STURM 1825)

General distribution: East and West Siberia, Middle Asia, Middle East, Transcaucasia, Europe (from central Russia in the east to France and northern Iberian Peninsula in the west and southwest, and from Fennoscandia in the north to Italy and the Balkan Peninsula in the south and southeast).

Distribution in Middle East: Reliable records were so far known from Turkey (JAEGGER 1992: 226, JAEGGER 1999: 962), Iran (JAEGGER 1999: 962) and Afghanistan (JAEGGER 1999: 962).

The records of A. dorsalis (= A. parvulus) from Afghanistan, Kabul and Kandahar (JEDLICKA 1955: 191) refers to A. maculatus (SCHAUM) (specimens from Kandahar) and A. flaviceps (specimens from Kabul), according to revised specimens collected by Klapperich at this localities. The records from Afghanistan, "Khurd-Kabul" (MANDL 1967: 463) respectively "Churd-Kabul" (JEDLICKA 1967: 73) refer to A. flaviceps, according to revised specimens. Another record of A. dorsalis from Afghanistan, Kunduz (JEDLICKA 1967: 73) is based on a atypical female which can not be assigned with certainty to A. parvulus or A. maculatus. Other collections from the same locality may show whether A. parvulus occur there.

The following additional material from the Middle East, including first records for the Turkish provinces Bitlis, Erzincan, Erzurum, Hakkâri and Samsun, and for the Iranian provinces Chahar-Mahal Bakhtiari, Esfahan, Kerman, Khorasan, Lorestan and Mazanda-ran, has been examined. Other collections from the Gilgit-Baltistan region in northeastern Pakistan show that the species occurs probably also farther east of Iran and Afghanistan. However, this female record from Pakistan needs verification by males from the same area.

Examined material:


Iran: Chahar-Mahal and Bakhtiari: 10 km E Naghan, N32°00′16″/E50°47′51″, IV 2007, Felix (2 – cFEL). - Esfahan: 15 km NNO Semirom, 2650 m (Mt. Aljud), N 31°32′09″ E 051°37′23″. V. 2007, Frisch & Serri (1 – MNHUB); 40 km SW Semirom, 2080m, N 31°1′4″ E 051°24′09″. V. 2007, Frisch & Serri (1 – MNHUB). - Fars: Dasht Arjan, VI. 1969, Pretzmann & Bilek (1 – NHMW); Semirom-Abadeh rd: 22 km NO Khoosrow-Shirin, 2480 m, N 30°58′30″ E 052°06′45″. V. 2007, Frisch & Serri (2 – MNHUB). - Kerman: Baf Darch-Pahn, 1750 m, V. 1977, Saf., Paz., Abai (1 – HMIM); Bardsir-Baft road: QaFeh Askar, 2750 m, N 29°30′17″ E 056°37′51″ + N 29°30′18″ E 056°37′47″, V. 2007, Frisch & Serri (9 – MNHUB); Bardsir-Sirjan road: 45 km SW Bardsir, 2540 m, N 29°51′15″ E 056°06′24″, V. 2007, Frisch & Serri (4 – MNHUB). - Khorasan:
Acupalpus (Acupalpus) parvulus (STURM 1825) / maculatus (SCHAUML 1960)

The following records from Iran, Turkey and Afghanistan are based on females. According to present knowledge a reliable identification of atypical female specimens of *A. parvulus* (STURM) or *A. maculatus* (SCHAUML) is impossible due to the overlapping great variability of both species in colour and various other external characters. Thus, males or typical specimens from the same localities are necessary to refer the records to one of the mentioned species.

Examined material:


**Afghanistan**: Prov. Kataghan, Kunduz, 400 m, (43), V. 1966, Šimek (1 – MMB).

**Acupalpus (Acupalpus) schnitteri JAEGGER 1999**

General distribution: Israel and Syria.

Originally described as *Acupalpus suturalis* ssp. *schnitteri*, the taxon has been recently upgraded to species level (WRASE 2009: 906). It has been so far recorded from Syria (JAEGGER 1999: 964) and Israel (JAEGGER 1999: 962, WRASE 2009: 906).

The following additional material from Israel has been examined.

Examined material:

**Israel**: Northern District: Hare Meron, 1000-1200 m, IV. 1987, Heinz (3 – cHEI); N-Galiläa, NW Zefat, W Meron, Tümpel S Mt. Meron, 250 m, , IV. 1996, Staven & Schnitter (3 – cSCHN). – Golan Hights: N Kela, 750 m, Feuchtwiese, V. 1996, Schnitter & Staven (1 – cWRA).

**Acupalpus (Acupalpus) suturalis DEJEAN 1829**

General distribution: France, Italy, Balkan Peninsula, southern Central and eastern Europe, Transcaucasia, Turkey.

Distribution in Middle East: Reliable records are so far known only
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drom Turkey (APFELBECK 1904: 205, JAEGGER 1992: 227, 1999: 962). The country records from Iraq without detailed localities (ALI 1966: 21, 1974: 54) are based most likely on a misidentification and refer probably to another species of the A. suturalis group.

The following additional material from Turkey, including first records for the provinces Ağrı, Ankara, Konya, Niğde and Tokat has been examined.

Examined material:

Acupalpus (Acupalpus) turcicus JAEGER 1992
General distribution: Middle East.
So far recorded from Cyprus (JAEGER 1999: 965, AUSTIN et al. 2008: 68, 69), Turkey (JAEGER 1992: 227) and Egypt (JAEGER 1999: 965).

The following additional material, including a possible first record for Iran and a first record for the Turkish province Mardin has been examined. The record from Iran is based on a somewhat atypical female and therefore should be confirmed by males from the same locality because of possible confusion with atypical females A. paludicola REITIT.

Examined material:

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Zusammenfassung
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