

OCYDROMUS (NEPHA) KERMANUS N. SP.
FROM MT. ZAGROS (IRAN)
(Coleoptera, Carabidae)

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INTRODUCTION AND MATERIAL

The recent review of *Ocydromus (Nepha)* Motschulsky, 1864 (Bonavita & Vigna Taglianti 2010) allowed us to notice that some specimens, collected by Kamil Orszulik in the SE-Iran and occurring in the collection of one of us (KR), belong to a new taxon, that we are going to describe in this paper.

We studied five specimens, now housed in the following collections (with their acronyms): Paolo Bonavita, Roma, Italy (Bo); Karel Rébl, Nové Strašecí, Czech Republic (Re); Kamil Orszulik, Frýdek-Místek, Czech Republic (Or).

Measured sizes (tab. 1): TB = total body, from the apex of clypeus to the apex of elytrae; PW = maximum width of pronotum; PL = length of pronotum, measured along the median line; BP = width of the base of pronotum, measured between the two hind angles; AP = width of pronotum in the anterior part, measured from right to left front angle; PW/L = width/length ratio of pronotum; PA/B = anterior/basal ratio of pronotum; EW = maximum width of elytrae; EL = length of elytrae, from the base of scutellum to the apex of elytrae; AL = aedeagus length; SL = spermatheca length.

***Ocydromus (Nepha) kermanus* n. sp.**

DIAGNOSIS. Species of *caucasicus* group, of medium size, TB ♂♂ 3.82 mm (3.78-3.84), ♀♀ 3.96 mm (3.78-4.15), black and bright; anten-

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nomeres black; pronotum with lateral furrow wide in all length and base with angles weakly risen; elytral striae 1-7 on average punctuated, visible after the elytral half; legs with femora and knees black, tibiae reddish. Microsculptura missing in males, occurring in the female only at the elytral apex.

TYPE SERIES. HOLOTYPE ♂: “IRAN. Maimand, prov. Kerman, 160 km W Kerman, lgt. Orszulik 8.5.2010 / coll. Bonavita ITALY”(Bo). Paratypes: “IRAN. Maimand, prov. Kerman, 160 km W Kerman, lgt. Orszulik 8.5.2010 / coll. Orszulik CZECH Rep.”, 1 ♂ imm., 2 ♀♀!(Or); “IRAN. Maimand, prov. Kerman, 160 km W Kerman, lgt. Orszulik 8.5.2010 / Bembidion (*Nepha*) sp.n., K. Rébl det., 2011 / coll. Rébl CZECH Rep.”, 1 ♂!(Re).

LOCUS TYPICUS. The small town of Maimand [Meymand, 2209 m, on www.mapcarta.com] is situated between two towns: Yazd and Kerman. It is located at about 2200 m, in the Mt. Masāhim (Atlante Zanichelli 2009), an isolated massif rising to 3472 m.

DESCRIPTION OF THE HOLOTYPE ♂. Specimen (TB 3.84 mm) with head and palpi blackish; antennomeres black. Some small points near the posterior seta of the eyes.

Pronotum (PL 0.74 mm, PW 0.98 mm, PW/L 1.32) cordate, strongly narrower at the base than anteriorly; sides sinuated before the back angles, that are right; base with small lateral indentation and points more numerous but less impressed in confront of *seriatus* (Motschulsky,

Tab. 1 – Sizes (mm) of *Ocydromus (Nepha) kermanus* n. sp.: PL = length of pronotum; BP = width of the base of pronotum; PW = maximum width of pronotum; AP = width of pronotum in the anterior part; PW/L = width/length ratio of pronotum; PA/B = anterior/basal ratio of pronotum; EW = maximum width of elytrae; EL = length of elytrae; TB = total body.

♂ ♂ (3 ex.)	PL	PB	PW	AP	PW	PA	EW	EL	TB
					L	B			
Total mean	0,74	0,63	0,96	0,73	1,30	1,15	1,46	2,34	3,82
Minimum	0,72	0,60	0,94	0,72	1,30	1,20	1,46	2,32	3,78
Maximum	0,74	0,65	0,98	0,74	1,32	1,15	1,46	2,38	3,84
♀♀ (2 ex.)	PL	PB	PW	AP	PW	PA	EW	EL	TB
					L	B			
Total mean	0,74	0,65	0,98	0,74	1,32	1,15	0,52	2,44	3,96
Minimum	0,72	0,60	0,94	0,72	1,30	1,20	1,46	2,32	3,78
Maximum	0,77	0,70	1,03	0,77	1,34	1,10	1,59	2,56	4,15

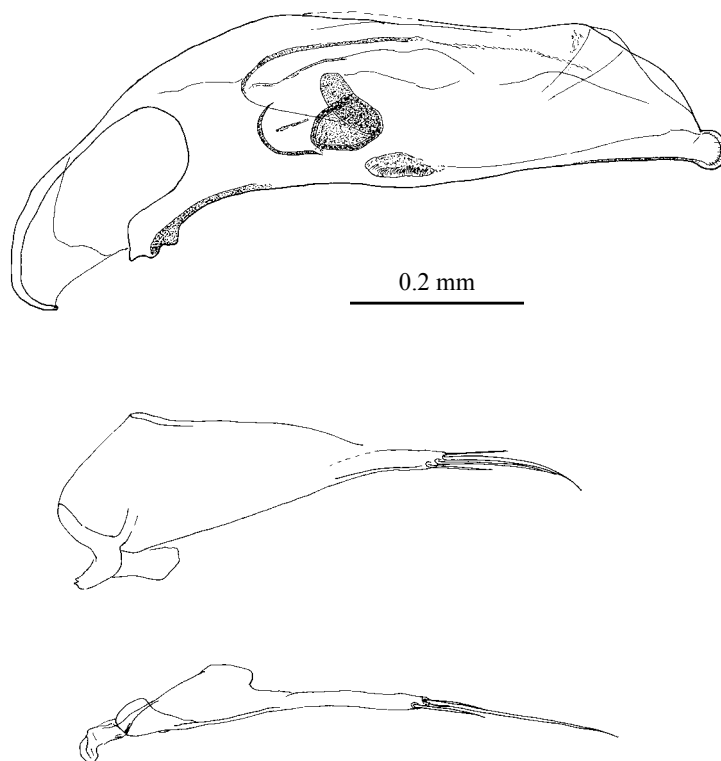


Fig. 1 – *Ocydromus (Nepha) kermanus* n. sp., holotypus: aedeagus in lateral view.

1844); basal foveae clearly visible, with basolateral carina; lateral furrow wide in all length. Some small points, not always visible, occur on the anterior margin. Microsculptura missing.

Elytrae (EL 2.38 mm, EW 1.46 mm) with subparallel sides, with maximum width beyond the half; omera protruding; striae 1-7 middly punctuated, visible also beyond the elytral half; stria 7 punctuated as the stria 6. Microsculptura missing.

Legs with femora black; apex of the femora and knees brown-reddish, tibiae reddish, tarsomeres reddish or brown.

Aedeagus (fig. 1; terminology of the sclerites in according to Bonavita & Vigna Taglianti 2010) (AL 0.84 mm) with median lobe bent, right near the round apex; basal bulb short; inferior margin with a weakly central convexity; parameres with 3 and 4 setae (2+1 weakly moved in the right, 3+1 very moved in the left). Brush sclerite middly big and elongat-

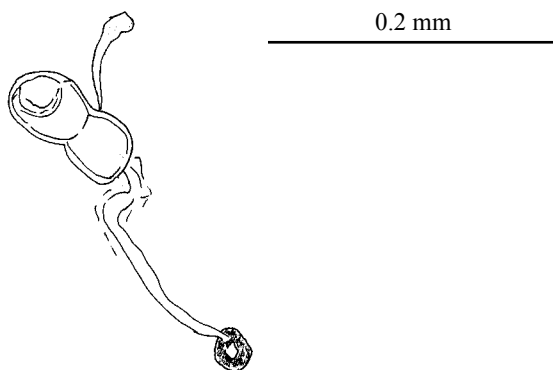


Fig. 2 – *Ocydromus (Nepha) kermanus* n. sp: spermatheca.

ed, oblique; basal sclerites typical of the *caucasicus* group (Bonavita & Vigna 2010): SB-A as arc-form and SB-B as a right line, inserted more or less at the centre of the arc; principal sclerite of sub-oval form, well sclerotized especially at the border, overlapped to the brush sclerite; ventral sclerite SV-A elongated, just above the convexity of the inferior side; SV-B missing; dorsal plate (lateral sclerite) narrow and elongated, above the brush sclerite; ostium with the frenulum of medium length and the ostium flag clearly visible.

DESCRIPTION AND VARIABILITY OF THE PARATYPI. Almost all characters as in the holotypus. Pronotum ♂♂ PL 0.74 mm (0.72-0.74), PW 0.96 mm (0.94-0.98), PW/L 1.30 (1.30-1.32); ♀♀ PL 0.74 (0.72-0.77), PW 0.98 (0.94-1.03); PW/L 1.32 (1.30-1.34), with the lateral furrow wider ahead and narrow in the back; the base can have a small lateral indenture more or less emphasized; the oblique base before the hind angles it's always well visible. The basal punctuation can be more or less reduced.

Elytrae ♂♂ EL 2.34 mm (2.32-2.38), EW 1.46 mm; ♀♀ EL 2.44 mm (2.32-2.56), EW 1.52 (1.46-1.59). In some specimens the outer striae (4-6) can have the points more strongly impressed and the stria 7 hardly visible.

Legs with femora black; apex of the femora and knees brown-reddish or black, tibiae reddish, tarsomeres reddish or brown.

Spermatheca (fig. 2) (SL 0.17 mm) - with both the superior and inferior chambers of the same size; annulus receptaculi present.

DERIVATIO NOMINIS. The name of this species derives from the Kerman province, where the type locality is situated.

DISTRIBUTION. Species of the E-Iran, where this species seems to be isolated in the Masāhim massif, to E of Zagros mountains. This is the locality more to the South-East in the *Nepha* areal. Also another isolated species, *Ocydromus (Nepha) deliae* (Morvan, 1973), occurs in the SE-peripheral area of the distribution of *Nepha*. Chorotype: IRAW (according to Vigna Taglianti et al. 1999).

NOTES. Species very similar to *O. laevipennis* (G. Müller, 1918) and *O. seriatus*. It differs from *laevipennis* for: 1. basal angles of pronotum more protruding; 2. lateral furrow of pronotum wider; 3. basal margin of pronotum indented; 4. elytral striae more punctuated; 5. lateral margins of elytrae parallel. It differs from *seriatus* for: 1. lateral furrow of pronotum wider; 2. basal margin indented; 3. basal foveae smaller; 4. base of pronotum with points more numerous but less impressed; 5. lateral margins of elytrae parallel; 6. tibiae reddish.

We take this opportunity to add here new data records of *Ocydromus (Nepha)*, especially from Rébl (Re) and Wrase (W) collections. We notice the first data of *Ocydromus (Nepha) adanae* (De Monte, 1952) for Chios island and other two new localities of *Ocydromus (Nepha) bicikensis* Bonavita & Vigna Taglianti, 2010.

***Ocydromus (Nepha) caucasicus* (Motschulsky, 1844)**

Iran, prov. Teheran, Elborz mts. 2600 m, Hosseinabad vill. W of Gach Sar, 36.07.97 N - 51.14.90 E, leg. M. Kalabza, 1 ♂!(Re); Iran, Küh-e Sahand, [Pohon], 30 km South Tabnz, 2981 m .nm, 37° 45' N, 46° 30' E, 25.VI.2000, leg. Jan Fikera, 1 ♂!(Re). Turkey bor., Kizildag Geçidi, pass W, 30 km W of Refahiye, 2300-2600 m, leg. S. Benedikt, 1 ♂!(Re). URSS, Armenia, Caucasus, Dilizan env., 3.VI.1989, leg. V. Šilha, 1 ♂!(Re).

***Ocydromus (Nepha) laevipennis* (G. Müller, 1918)**

Iran bor., 2 km E Ilka, (40 km W Baladeh), prov. Mazandaran, 3000 m, 36°14'N - 51°26'E, 31.V.2006, leg. A. Reiter, 1 ♂! (Re).

Ocydromus (Nepha) seriatus (Motschulsky, 1844)

USSR, Abkhazia, pr. Achadara pass, 20.VI.1986, leg. Odvárka, 1 ♂! (Re).

Ocydromus (Nepha) bicikensis Bonavita & Vigna Taglianti, 2010

Turkey, Giresun prov., Giresun Dagl., Karagöl Dagi, Egribel Geçidi pass, alp-snow, 2200-2400 m, 14.7. 1998, leg. S. Benedikt, 1 ♂, 1 ♀ (Re); Giresun prov., Tamdere, 30.V. 1992, leg. Z. Hanousek, 1 ♀ (Re).

Ocydromus (Nepha) syropalaestinus Bonavita & Vigna Taglianti, 2010

Syria, 30 km NW Damascus, Bloudan, 2.V.2011, 1800 m, leg. Orszulik, 15 ♂♂, 18 ♀♀ (coll. Rébl, Orszulik, Zieris, Holiš, Bonavita, Toledano); Syria m. occ., Anti-Lebanon Mts, NW Damascus, Bludan env. 2000 m, alp, 3.V.2000, leg. S. Benedikt, 4 ♂♂, 3 ♀♀ (Re).

Ocydromus (Nepha) vseteckai vseteckai (Maran, 1936)

“ISRAEL (North distr.), Upper Galilee, 3 km W Ma’ala Gamla ca-200 m (stony bank of sluggish stream), 32° 53.469’N/035°39.608’E, 22.IV.2006 D.W. Wrase [5A]”, 2 ♀♀!(W); “ISRAEL (North distr.), Tanur Reserve 345 m, Tanur (Jyon) river, 33° 16.101’N/035°34.714’E (Salix/Nerium floodplain forest, loamy gravel bank), 1.V.2006 D.W. Wrase [24]”, 1 ♂, 1 ♀!(W); “N ISRAEL sea of Galilee, Ost-Ufer, Hukkok SSW, Ammud (Bachufer), 2.V.1996 Schnitter/Staven”, 1 ♀ imm.! (W).

Ocydromus (Nepha) vseteckai adanae (De Monte, 1952)

“TURKEY, Adana, 37 km N Kozan, S Feke, 670 m, 37°46’18’’N, 35°53’56’’E (moist place near road, 7.IV.2004 M. Schülke [T04-21]”, 1 ♂, 1 ♀!(W). Greece: SE Chios I., Komi, pond on beach, 2-10.VII.2011, leg. Petr Bulirsh, 1 ♀! (Re).

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SUMMARY

Ocydromus (Nepha) kermanus n. sp. is described coming from southern Mt. Zagros, in the Kerman province. Other new data records of distribution are reported about some species of *Ocydromus (Nepha)*.

RIASSUNTO

Ocydromus (Nepha) kermanus n. sp. dei Monti Zagros (Iran) (Coleoptera, Carabidae).

Viene qui descritta *Ocydromus (Nepha) kermanus* una nuova specie iraniana dei Monti Zagros meridionali, nella provincia di Kerman; vengono inoltre riportati nuovi dati sulla distribuzione di alcune specie di *Ocydromus (Nepha)*.

REFERENCES

- AA. VV. 2009. Atlante Zanichelli. Zanichelli editore S.p.A., Bologna, Italy, 290 pp.
- BONAVITA, P. & A. VIGNA TAGLIANTI. 2010. *Ocydromus* subg. *Nepha* Motschulsky, 1864: revisione tassonomica, filogenesi e biogeografia (Coleoptera Carabidae). *Memorie della Società entomologica italiana* 89: 7-180.
- VIGNA TAGLIANTI, A., P. A. AUDISIO, M. BIONDI, M. A. BOLOGNA, G. M. CARPANETO, A. DE BIASE, S. FATTORINI, E. PIATTELLA, R. SINDACO, A. VENCHI, M. ZAPPAROLI. 1999. A proposal for a chorotype classification of the Near East fauna, in the framework of the Western Palearctic region. *Biogeographia, Lavori della Società Italiana di Biogeografia*, (n.s.) 20: 31-59.