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*Afghanoderus mirabilis* gen. et sp. n. from Afghanistan  
(Hemiptera: Heteroptera: Cantacaderidae)

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ABSTRACT. *Afghanoderus mirabilis* gen. et sp. n. is described from Afghanistan. *Afghanoderus* gen. n. is the second known (after *Cantacader* AMYOT et SERVILLE) Palaeartic genus of *Cantacaderidae*. Habitus of the holotype (male), egg, male and female external genitalia, male paramere and phallus are figured. Systematic position of the new genus and species within the family is briefly discussed.

Key words: entomology, taxonomy, new genus, new species, *Hemiptera*, *Heteroptera*, *Cantacaderidae*, Afghanistan.

The family *Cantacaderidae* was hitherto represented in the Palaeartic fauna only by genus *Cantacader* AMYOT & SERVILLE (PÉRICART 1983, AUKEMA & RIEGER 1995, B. LIS 1999). Among the material borrowed from the National Museum of Natural History in Prague (Czech Republic), I have found two specimens representing a Palaeartic species and genus undescribed so far.

I would like to express my sincere thanks to Dr. V. ŠVIHLA (National Museum of Natural History, Prague, Czech Republic) for the loan of the material relevant to the study.

***Afghanoderus* n. gen.**

Type species: *Afghanoderus mirabilis* n. sp.

## ETYMOLOGY

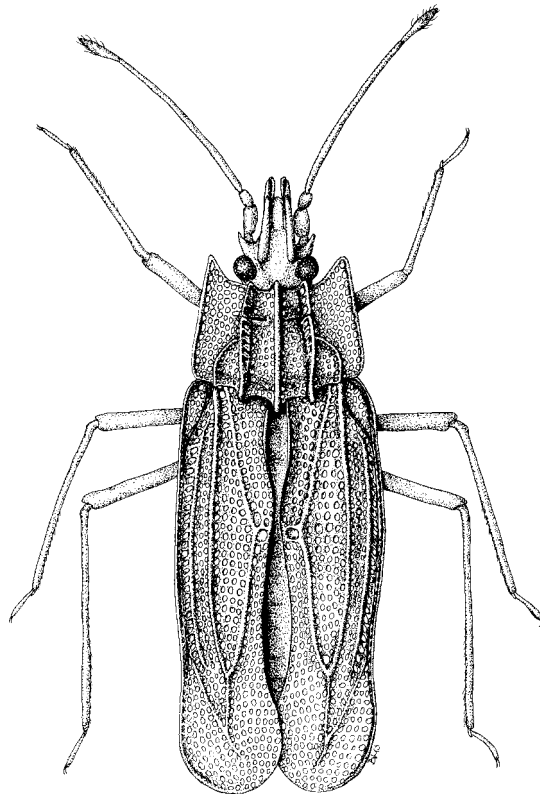
„*Afghano-*” refers to Afghanistan, „*-der*” - ending often used in *Cantacaderidae*, „*-us*” - gender masculine.

## DIAGNOSIS

The new genus resembles *Cantacader* AMYOT & SERVILLE, the only hitherto known Palaearctic representative of the family. Nevertheless, its relatively short pronotum, the absence of costal area in the middle part of hemelytron, and the presence of an additional, longitudinal vein on the subcostal area make it possible to distinguish *Afghanoderus* from *Cantacader*.

## DESCRIPTION

Head long, armed with two pairs of long and forward-directed cephalic spines; bucculae long, distinctly surpassing head apex, but not touching each other apically, their laminae almost parallel; rostral laminae low, composed of one row of areolae.



1. *Afghanoderus mirabilis*: general habitus of the holotype

Pronotum relatively short, bearing five thick and high carinae; lateral carinae interrupted on calli; paranota broad, their lateral margins straight, each paranotum forming an angular projection anterolaterally; posterior pronotal margin expanded backward along median and lateral carinae, and insinuated between them.

Hemelytra narrow; costal area present only in the basal and apical parts of hemelytron; subcostal area divided in two parts (external – almost vertical and internal – almost horizontal) by an additional, longitudinal, convex vein; discoidal area elongated.

Ostiolar pore well visible.

Male genitalia as in Figs 2-4, endosomal protuberances of phallus not abundant, very small and irregular in shape (Fig. 4a); female genital plates as in Fig. 6, subgenital plate small, unseparated from the 7<sup>th</sup> sternite; egg as in Fig. 5.

### *Afghanoderus mirabilis* n. sp.

(Figs 1-6)

#### DESCRIPTION

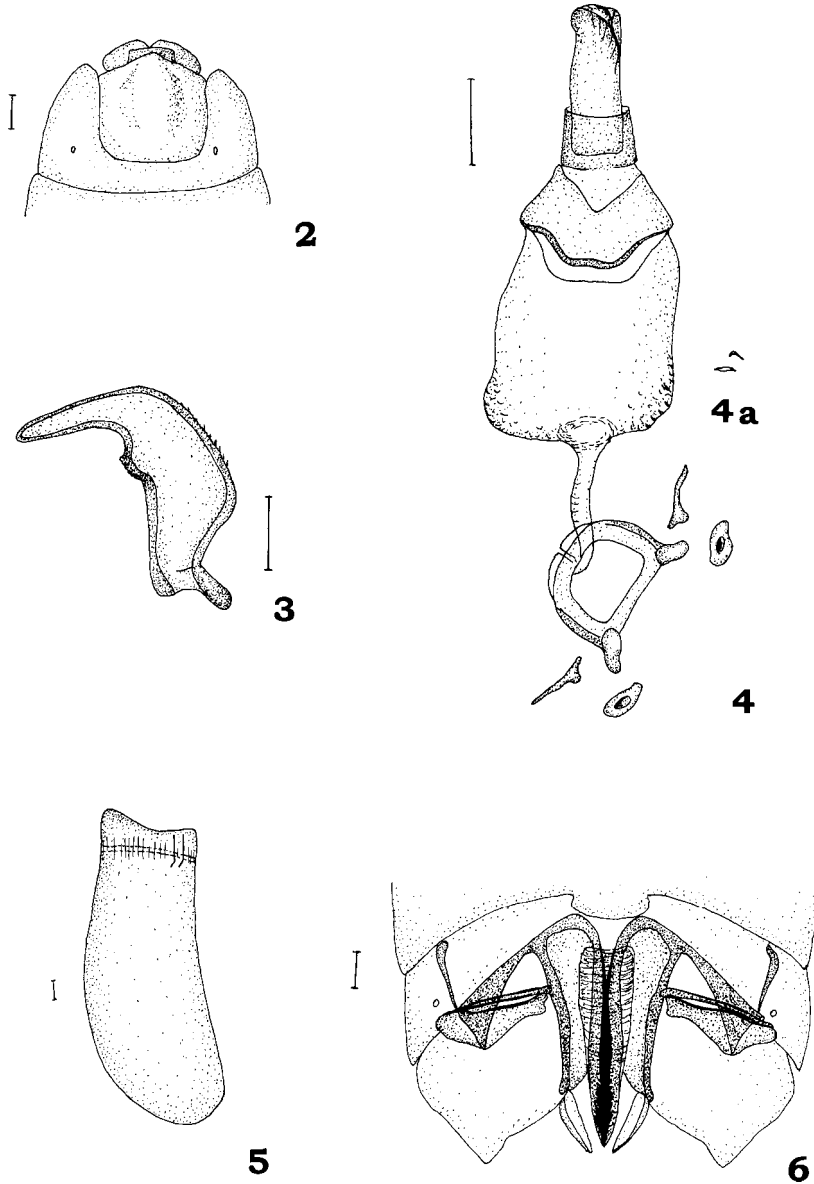
Coleopterous form. Total body length – 3.25 mm (male), 3.79 mm (female); body width – 1.07 mm (male), 1.17 mm (female); length of pronotum – 0.67 mm (male), 0.87 mm (female); width of pronotum – 0.90 mm (male), 1.19 mm (female); length of hemelytron – 2.20 mm (male), 2.56 mm (female); length of discoidal area – 1.52 mm (male), 1.87 mm (female).

General colour ochreous, inner edges of clavi darker than remaining surface.

Head elongated in its preocular part, with two pairs of long, rather blunt, forward-directed spines; eyes relatively small, reddish, frons 1.73 (male) or 2.1 (female) times broader than the eye width; bucculae long, extending beyond the second antennal segment, their apices narrowly tongue-like, laminae almost parallel, each of them bearing two rows of areolae. Rostrum long, reaching the posterior edge of fourth abdominal sternite. Apical angles of antenniferous tubercles prolonged as moderately long, rather blunt spines. Antennae slender, four-segmented, ochreous, fourth segment apically embrowned and bearing well visible hairs; length of segments (in mm): 0.18 : 0.09 : 0.93 : 0.28 (male), 0.18 : 0.09 : 0.91 : 0.28 (female).

Pronotum relatively short, with posterior margin slightly expanded backward along median and lateral carinae; pronotal disc almost flat, with tiny areolae and five carinae; suprahumeral carinae rather short, lower than laterals, composed of one row of small areolae, bent inward and nearly touching lateral carinae; the latter as high as the median one, composed of one row of vertically elongated areolae and interrupted on calli. Paranota broad, with lateral margins straight, forming two angular projections anterolaterally; each paranotum composed of six rows of areolae anteriorly, seven to eight rows of areolae in the middle, and three to four rows of areolae in the posterior part. Calli pale brown, slightly impressed.

Hemelytra narrow, their apices rounded; lateral margins of hemelytra almost parallel; stenocostal area composed of one row of very small areolae; costal area present only in basal and apical parts of hemelytron; subcostal area divided by an additional, longitudinal, convex vein in two parts - narrower, almost vertical



2-6. *Afghanoderus mirabilis*: 2 – male external genitalia, ventral view, 3 – male paramere, 4 – phallus, 4a – shape of endosomal protuberances of phallus, 5- egg, 6 – female genital plates, ventral view

external part, composed of one row of regular areolae, and broader, almost horizontal internal part, composed of two to three rows of small, irregular areolae; discoidal area elongated; sutural area narrow, slightly overlapping in repose; hemelytra not touching each other along inner edges of clavi and sutural areas.

Legs long and slender, ochreous; tibiae slightly flattened laterally, with short and stiff hairs in distal parts; tarsi relatively long. Abdominal sternites yellowish brown.

#### TYPE MATERIAL

Holotype male: Afghanistan, Bashgultal, 1100 m, Nuristan 11. 4. 53, J. Klapperich; in the collection of National Museum of Natural History, Prague, Czech Republic. Paratype female: the same data as the holotype (in the author's collection).

#### DISCUSSION

The new genus is classified within the family *Cantacaderidae* on the basis of the following characters: two pairs of cephalic spines (jugo-frontals and preoculars) present on head, lateral pronotal carinae interrupted on calli, pleural ostiolar pores crevice-like, hemelytron with a stenocostal area, trochanter fused with femur.

The new species representing the new genus differs from all other representatives of *Cantacaderidae* in having an additional vein between Sc and R+M. This vein is well developed, but is not connected to either Sc nor R+M. The additional vein can be regarded as an apomorphy of the new genus.

I have had a possibility to study an egg of the new species (the second known egg within the family); it turned out to be similar to the egg of *Cantacader infuscatus* DISTANT described by COBBEN (1968) with respect to the placement of its micropyles. In both known eggs the two micropyles are located close to the anterior pole of the egg (Fig. 5); in known eggs of *Tingidae* (PÉRICART 1983) the two micropyles are placed symmetrically on the left and right side of the egg.

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