Amnestus raunoi n. sp. from Iran, the first Old World representative of the New World subfamily Amnestinae (Hemiptera: Heteroptera: Cydnidae)

Jerzy A. Lis

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Amnestus raunoi, a new species from Iran, the representative of the New World subfamily Amnestinae for the first time recorded in the Old World is described, illustrated and compared with its closest relative — *A. pusillus* Uhler.

Jerzy A. Lis, Department of Zoology, University of Opole, Oleska 22, PL-45-052 Opole, Poland

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1. Introduction

The subfamily Amnestinae contains the single genus *Amnestus* Dallas with 25 extant species known to be restricted in their distribution range only to the western hemisphere. The genus *Amnestus* Dall. is (as is the subfamily Amnestinae) easily recognisable among all the Cydnidae by the presence of a distinct claval commissure, a very unusual feature even in whole Pentatomoidea.

During a visit to the Gilan province in Iran (made by Rauno E. Linnavuori in 1994), four specimens (one male and three females) undoubtedly representing the genus *Amnestus* were collected. The specimens appeared to represent a new species, which is described below.

The Gilan province is quite unique in the whole Middle East. Owing to the influence of the Caspian Sea the climate is very humid (annual rainfall in lowlands about 1.5 m, in mountains still higher). Mountain slopes are covered with dense deciduous forests, lowlands with rice and tea plantations. The new species was found at a light trap near rice fields at Sume'eh Sara. The main locality is a little planted park (*Quercus* sp., *Ulmus* sp.) in Rasht, where the bugs were collected by R. E. Linnavuori also in July–August 1995–1996; nevertheless, despite repeated attempts further specimens of this new species have not been found.

2. Description of a new species

***Amnestus raunoi*, sp. nov.**
Fig. 1a–c

Type material. Iran: Gilan, Sume'eh Sara, male holotype, 2 female paratypes, 4–5.8.1994, R. Linnavuori; Iran: Gilan, Rasht, female paratype, 2–3.8.1994, R. Linnavuori; Holotype and one paratype in R. E. Linnavuori collection, two paratypes in J. A. Lis collection.

Description. Body length 2.39 mm (male), 2.32–2.49 mm (female), body width 1.16 mm (male), 1.17–1.27 mm (female). General coloration brownish-yellow; head, pronotum and scutellum darker than corium.

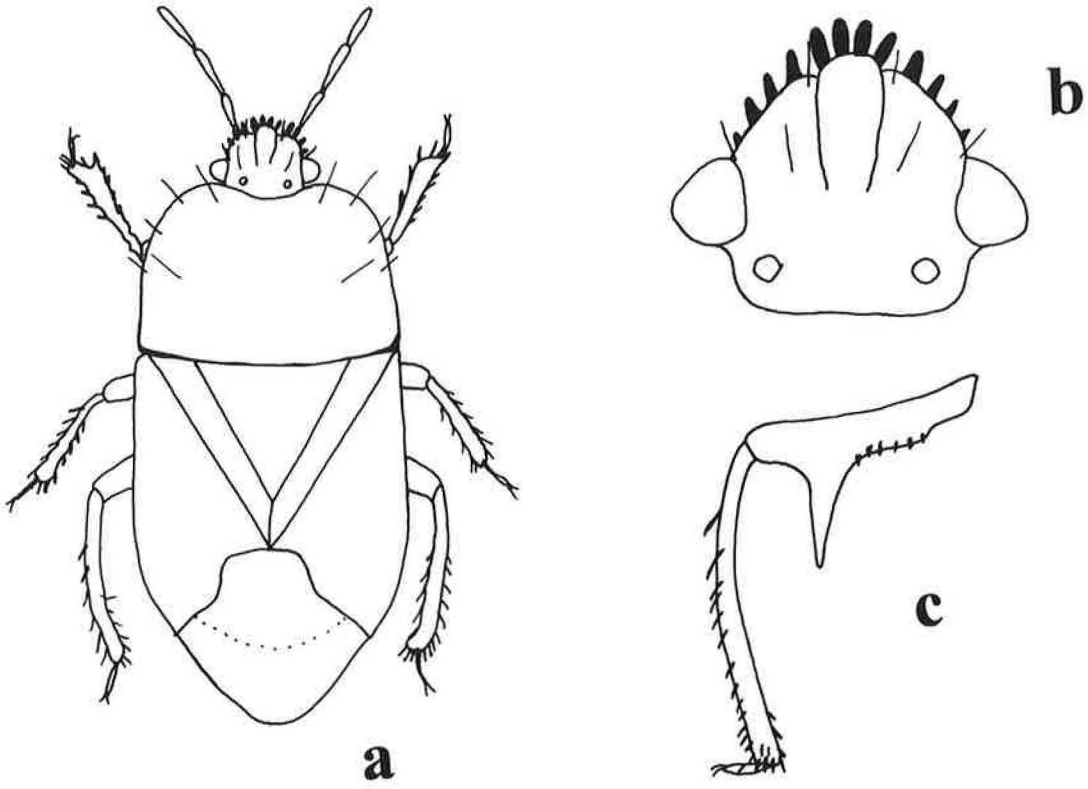

Fig. 1. *Amnestus raunoi* n. sp. — a: Body outline. — b: Head. — c: Male posterior leg.

Head (Fig. 1b) broader than long. Clypeus conspicuously longer than paraclypei, and apically with four pegs; each paraclypeus with four submarginal pegs becoming finer toward eye. Head surface, except clypeus and anterior part of paraclypei, with large coarse punctures. Eyes reddish-brown, ocular index about 2.9–3.1; ocelli large, reddish-brown. Antennae five-segmented, pale brown, 3rd and 4th segments longest, almost equal to each other, 3rd segment about 7.5–8.5 times longer than the 2nd. Rostrum pale brown, reaching between middle coxae.

Pronotum (Fig. 1a) 1.4–1.6 times wider than long; anterior margin conspicuously concave; lateral margins slightly concave in basal third, and submarginally with a few (3–4) long hair-like setae. Pronotal transverse impression distinct, laterally marked by regular row of coarse punctures. Anterior lobe of pronotum with coarse punctures almost over entire surface (in the holotype male the puncturation is weaker than in the paratype females); the posterior lobe, except apices of umbones, almost evenly coarsely punctured.

Scutellum distinctly evenly punctured, puncturation as dense as on the anterior lobe of pronotum, punctures slightly larger than those on pronotum.

Corium paler than head, pronotum and scutellum; clavus with three rows of punctures, claval commissure distinct; mesocorium almost impunctured except for two rows paralleling claval suture; exocorium densely evenly punctured with the exception of costal area; costal margins basally slightly serrated. Membrane semihyaline, distinctly surpassing the tip of abdomen.

Propleuron impunctured, except for a row of punctures in depression; propleural carinae about as high as the 2nd rostral segment.

Anterior femur of female ventrally with small, hardly visible spine; anterior tibia of male with two prominent spines on inner margin; posterior femur of male with long, stout, sharply ended

spine, reaching about one third of posterior tibia length (Fig. 1c).

The last abdominal sternite of female with a flattened, polished area medially.

Etymology. The species is named after Rauno E. Linnavuori, who has collected the material during his trip to Iran.

3. Discussion

Of all the American species of the genus, *A. raunoi* appears to be very closely allied to *A. pusillus* Uhler. The two species are the only members of the genus characterised by the presence of four subapical pegs on clypeus coupled with the presence of a long strong subapical spine on the posterior femur (in male) and a flattened polished area on the middle of the last sternite (in female). The new species can be separated from its American congener (apart from its different distribution area) by the following characters: male — subapical spine on posterior femur slender and long (almost half length of posterior tibia) in *A. pusillus*, while it is more stout and shorter (about third length of posterior tibia) in *A. raunoi* (Fig. 1c); female — posterior femur with short, oblique subapical spine on the ventral margin in *A. pusillus*, posterior femur without such a spine in *A. raunoi*; anterior femur without modification in *A. pusillus*, anterior femur with small spine on ventral margin in *A. raunoi*.

The discovery of a Palaearctic species of the genus *Amnestus* seems to be very surprising; it also refutes the prevailing well-defined distribution area of the genus and the subfamily as a whole (hitherto confined to the New World territories).

Nevertheless, some genera of Cydnidae have a similar (but reverse) pattern of distribution as the genus *Amnestus*. *Chilocoris* Mayr and *Microporus* Uhler (of subfamily Cydninae), and *Sehirus* Amyot et Serville (of subfamily Sehirinae) all have many species in the Old World regions, while only the single representative in the New World (Froeschner 1960, Lis 1993, 1994) — *Chilocoris repetitus* (Uhler), *Microporus obliquus* Uhler, and *Sehirus cinctus* (Palisot de Beauvois), respectively.

Froeschner (1960: 631) found one specimen of *A. pusio* (St'l) labelled "Madagascar". He treated it as either a case of mislabelling or at most a stray specimen carried into that part of the world by the agency of man. In the light of the present knowledge on the distribution of the genus, it can not be excluded that also the specimen from Madagascar represented a native Old World species (closely allied to *A. pusio*, and as such treated by Froeschner, op. cit.). Till more material of the genus *Amnestus* found (without doubt) in the Old World countries is available, only a single species of the genus should be included in the fauna of that region.

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