

Hydrocyphon gerecke sp.n. from Morocco (Coleoptera: Scirtidae)

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Abstract : *Hydrocyphon gerecke* sp.n. (Coleoptera: Scirtidae) is described from the Moroccan Moyen Atlas. The new species has to be included in the *H. pallidicollis* species group, and it is mainly characterised by the strongly acuminate parameroids and the basal emargination of the median lobe. This is the fifth species of *Hydrocyphon* recorded from North Africa, four of them in the same species group.

Key words : Coleoptera, Scirtidae, *Hydrocyphon*, taxonomy, new species, Moyen Atlas, Morocco.

Introduction

The genus *Hydrocyphon* REDTENBACHER 1858 has 56 recognised species, distributed in the Palaearctic and Oriental regions and divided in ten species groups (KLAUSNITZER 2002; YOSHITOMI & KLAUSNITZER 2003; YOSHITOMI & SATÔ 2003). There are four known species in North Africa: *H. hydrocyphonoides* (TOURNIER 1868) from Algeria and Tunisia; *H. illiesi* KLAUSNITZER 1991 from Algeria; *H. pallidicollis* RAFFRAY 1873 from Algeria and Morocco; and *H. rectangulus* KLAUSNITZER 1991 from Algeria (KLAUSNITZER 1991). With the exception of *H. illiesi*, included in the *H. deflexicollis* species group (see Discussion), all of them belong to the *H. pallidicollis* species group (YOSHITOMI & KLAUSNITZER 2003).

In this paper we describe a new species collected in a sampling trip to the Moyen Atlas in Morocco in April 1998. The new species has also to be included in the *H. pallidicollis* group as defined by NYHOLM (1967), and it is mostly characterised by its male genitalia.

Taxonomy

Hydrocyphon gerecke sp. n.

H o l o t y p e : male: "(42) MOROCCO 9.IV.1998 / Ribat- el Kheir / O. Zloul, ca. 6 km SE / Ribera, Hernando & Aguilera leg." (Naturhistorisches Museum, Wien).

T y p e l o c a l i t y : Oued Zloul, 6 km SE of Ribat- el- Kheir, eastern Moyen Atlas, Morocco, North Africa.

E t y m o l o g y : We are pleased to name this species after Reinhard Gerecke, recognised water mite specialist, for the good times we spend in Morocco.

Description: Total length (head excluded) 2,5 mm, maximum width 1,7 mm. Body shape short, oval and moderately convex (Fig. 1).

Colour: Head black; labrum pale brown; upper surface of body and legs pale brown except three first tarsomeres dark brown; antennae black, three first antennomeres pale brown; ventral surface dark brown except prothoracic hypomera and epipleurae, which are pale brown (almost yellowish).

Head: Surface with fine punctation, covered with short, recumbent yellowish pubescence. Eyes prominent.

Pronotum: Transverse, narrower than elytra (Fig. 1); margins finely bordered; surface with very fine punctation, covered with dense, short and recumbent yellowish pubescence.

Elytra: Moderately convex; maximum width at middle. Surface with dense and fine punctures, stronger than on head and pronotum; covered with long, recumbent yellowish pubescence.

Ventral surface: Metasternum transverse; surface with fine, very dense (granulated) punctation, forming small, irregular transverse striae; surface of metasternum covered with short and recumbent pubescence. Abdominal sternites with dense, fine punctation; covered with short, recumbent pubescence.

Legs: Short and slender.

Male: Aedeagus as in Fig. 3; asymmetrical; parameroids as long as anterior part of the penis ("pala"), apex strongly acuminate; left parameroid slightly shorter and wider than right. Trigonium (sensu YOSHITOMI & KLAUSNITZER 2003 = prosthem sensu NYHOLM 1967) with only one projection; shorter than parameroids; slightly curved, apex truncated; base of trigonium with strong emargination, with a small tubercle on the left side. Tegmen (Fig. 2) poorly sclerotised; apex strongly narrowed; parameres with two acuminate basal expansions, divergent at apex; internal margin more sclerotised.

Female: Unknown.

Distribution: So far only known from the type locality.

Habitat: The only known specimen was collected washing the shore (including nearby vegetation) of the oued Zloul.

Discussion

Hydrocyphon gereckeii sp.n. has to be included in the *H. pallidicollis* species group sensu NYHOLM (1967), as it has only one projection of the trigonium ("additional pieces of the prosthem" in the terminology of NYHOLM 1967), and it has asymmetrical parameroids, with the left parameroid more robust than the right. The group has five known species in the western Mediterranean: *H. pallidicollis* (Corsica, Sardinia, Algeria, Morocco), *H. hydrocyphonoides* (Italy, Tunisia, Algeria), *H. laeticolor* NYHOLM 1967 (Iberian peninsula), *H. hamiota* NYHOLM 1972 (Iberian peninsula) and *H. rectangulus* (Algeria). The new species can be distinguished by the following characters: apex of parameroids acuminate (round in the other species; strongly dilated at apex, and much longer than trigonium in *H. hydrocyphonoides*, see NYHOLM 1977 Fig. 3H); apex of trigonium truncate, base emarginate and with a small tubercle in the left side (apex blunt in *H. laeticolor*,

with a terminal hook in *H. pallidicollis* – see NYHOLM 1967 Fig. 51-52 –, and with a totally different shape in *H. hamiota* and *H. rectangulus* – see NYHOLM 1972 Fig. 3F and KLAUSNITZER 1991 Fig. 28). None of the other species of the group has the base of the trigonium emarginate or with a tubercle.

In KLAUSNITZER (1991) two species with only one projection of the trigonium were described, one within the *H. pallidicollis* species group (*H. rectangulus*), but the other within the *H. deflexicollis* species group (*H. illiesi*, also from Algeria), although according to NYHOLM 1967 the species of this group have two projections of the trigonium ("additional pieces of the prosthema" in his terminology). According to KLAUSNITZER (1991), the inclusion of *H. illiesi* within the *H. deflexicollis* group was justified by the general resemblance of the aedeagus to other species of the group. To our view, the aedeagus of *H. illiesi* has some resemblance with that of *H. gereckeii* sp.n., although they are clearly distinguishable for the acuminate apex of the parameroids (round in *H. illiesi*), which are also more robust; the lack of expansion at the base of the trigonium (very apparent in *H. illiesi*); and for having the trigonium shorter than the parameroids (of the same length in *H. illiesi*) (see Fig. 26 in KLAUSNITZER 1991).

References

- KLAUSNITZER B. (1991): Über die Helodidae des östlichen und südlichen Mittelmeerraums. (81. Beitrag zur Kenntnis der Helodidae). — *Koleopterologische Rundschau* **61**: 159-170.
- KLAUSNITZER B. (2002): Eine neue Art und Artengruppe der Gattung *Hydrocyphon* REDTENBACHER aus Nepal (Col., Scirtidae). — *Entomologische Nachrichten und Berichte* **46**: 259-246.
- NYHOLM T. (1967): Zur Kenntnis der Gattung *Hydrocyphon* REDTENBACHER (Col. Helodidae). Studien über die Familie Helodidae. VIII. — *Opuscula Entomologica* **32**: 9-48.
- NYHOLM T. (1972): Drei neue *Hydrocyphon*-Arten aus dem Mittelmeergebiet (Coleoptera). — *Entomologica Scandinavica* **3**: 33-39.
- NYHOLM T. (1977): Beiträge zur Kenntnis der paläarktischen Helodiden 6-7. Studien über die Familie Helodidae XVIII-XIX. — *Entomologica Scandinavica* **8**: 97-108.
- YOSHITOMI H. & B. KLAUSNITZER (2003): Scirtidae: World check list of *Hydrocyphon* REDTENBACHER, and revision of the Chinese species (Coleoptera). — In: JÄCH M.A. & L. Ji (eds): *Water Beetles of China*, Vol. III, pp. 519-537. Wien: Zoologisch-Botanische Gesellschaft in Österreich and Wiener Coleopterologenverein.
- YOSHITOMI H. & M. SATÔ (2003): Scirtidae of the Oriental Region, Part 2. The genus *Hydrocyphon* (Coleoptera, Scirtidae) of Laos. — *Japanese Journal of systematic Entomology* **9**: 223-235.

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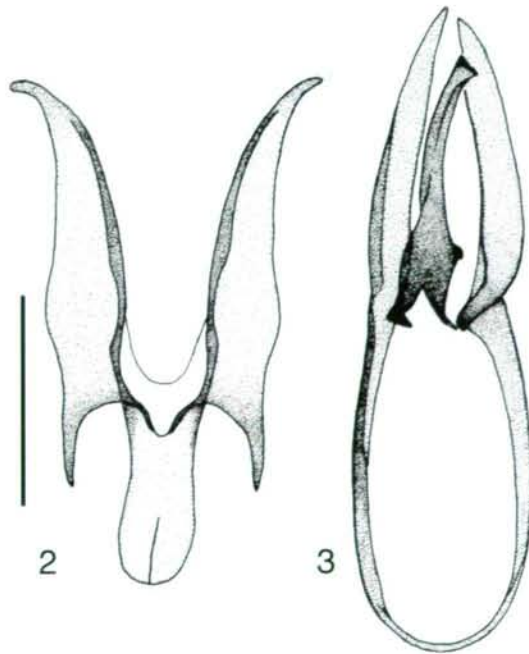
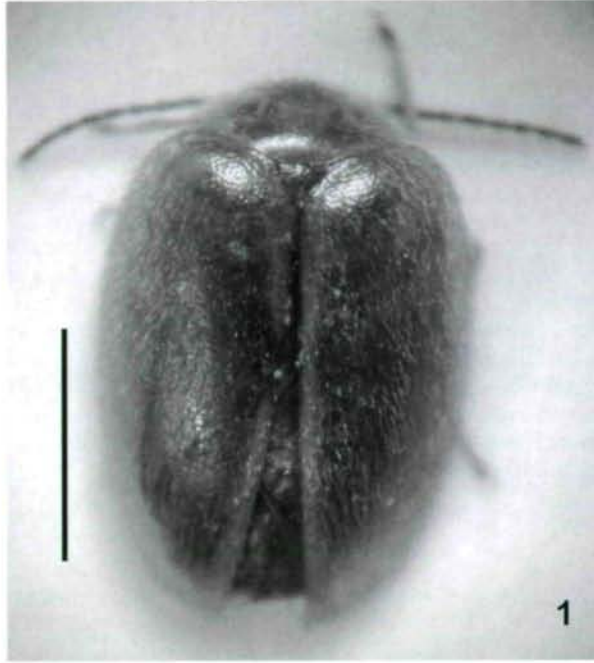


Fig. 1: *Hydrocyphon gereckei* sp.n., habitus. Scale bar, 1 mm. Fig. 2-3: *Hydrocyphon gereckei* sp.n. 2 – tegmen, dorsal view; 3 – aedeagus, dorsal view. Scale bar, 0,25 mm.