

Hydrochus tariqi sp.n. from south Spain (Coleoptera: Hydrochidae)

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Abstract

Hydrochus tariqi sp.n. from the extreme south of Spain is described. The species appears to be the sister species of *H. nooreinus* BERGE HENEGOUWEN & SAINZ-CANTERO from south Spain.

Key words: Coleoptera, Hydrochidae, *Hydrochus tariqi*, taxonomy, new species, Iberian Peninsula.

Introduction

The genus *Hydrochus* LEACH, with ca. 170 described species from all regions of the world (HANSEN 1998), forms a well defined monophyletic clade within the superfamily Hydrophiloidea (HANSEN 1991, 1997, ARCHANGELSKY 1998). Most authors consider it to be a family, although LAWRENCE & NEWTON (1995) treat it as a subfamily of Hydrophilidae. Since the revisional work of ANGUS (1976) the taxonomy of the European species is quite well known, but some confusion still persists among the Iberian and North African species. In this paper we describe a new species from the extreme south of Spain.

Acknowledgements and acronyms

We are grateful to Manfred A. Jäch and Garth N. Foster for their comments on the manuscript, and to Manfred A. Jäch, Juan Angel Díaz and Alberto Gayoso for providing specimens for study. We are also indebted to W. Zelenka for the habitus illustration.

CAB Coll. Aguilera, Barcelona
CDS Coll. Díaz, Santiago
CGS Coll. Gayoso, Santiago
CHB Coll. Hernando, Barcelona

CRB Coll. Ribera, Barcelona
NHM The Natural History Museum, London
NMW Naturhistorisches Museum, Wien

Hydrochus tariqi sp.n.

TYPE LOCALITY: Small stream, tributary of arroyo del Tiradero, ca. 1 m wide, slowly flowing, partly shaded by trees (oak) and bushes, ca. 100 m a.s.l., ca. 13 km W Los Barrios; 36°10' 47''N/ 5°34'33''W, 30STF6832707037, 30S/268327/4007037; see JÄCH et al. (1999: Fig. 7).

TYPE MATERIAL: **Holotype** ♂ (NMW): "ESPAÑA: Cadiz, 22.10.1998 \ ca. 13 km W Los Barrios \ ca. 100 m \ leg. M. Jäch (13)". **Paratypes:** 1 ♂ (NMW), same data as holotype; 1 ♂ (NMW), "SPAIN: CADIZ. Algeciras \ Afluente del Tiradero Km 6 \ desvío de C-440 a el Tiradero \ leg J.A.Díaz 22.10.1998"; 1 ♂ (CGS), "13) afl. Ayo. Tiradero Dehesa 13km W Los Barrios CA 22.10.98 A. Gayoso Leg."; 2 ♂♂ (CDS, NMW), "SPAIN: CADIZ. Tarifa \ Río Guadalmejí, N - 340 \ 1 Km W El Bujeo \ leg. J.A. Díaz 23.10.1998"; 1 ♂ (CGS), "16) Río Guadalmejí, El Bujeo, 10 km SW Algeciras CA 23.10.98 A. Gayoso Leg."; 1 ♂ (NHM), "SPAIN: Cádiz \ Facinas: r. Almodovar \ 26.vii.1998 I.Ribera leg."; 1 ♂ (CAB) "HISP. Cádiz \ Los Barrios: Arroyo del Tiradero \ 12.VIII.1998 leg. P.Aguilera".

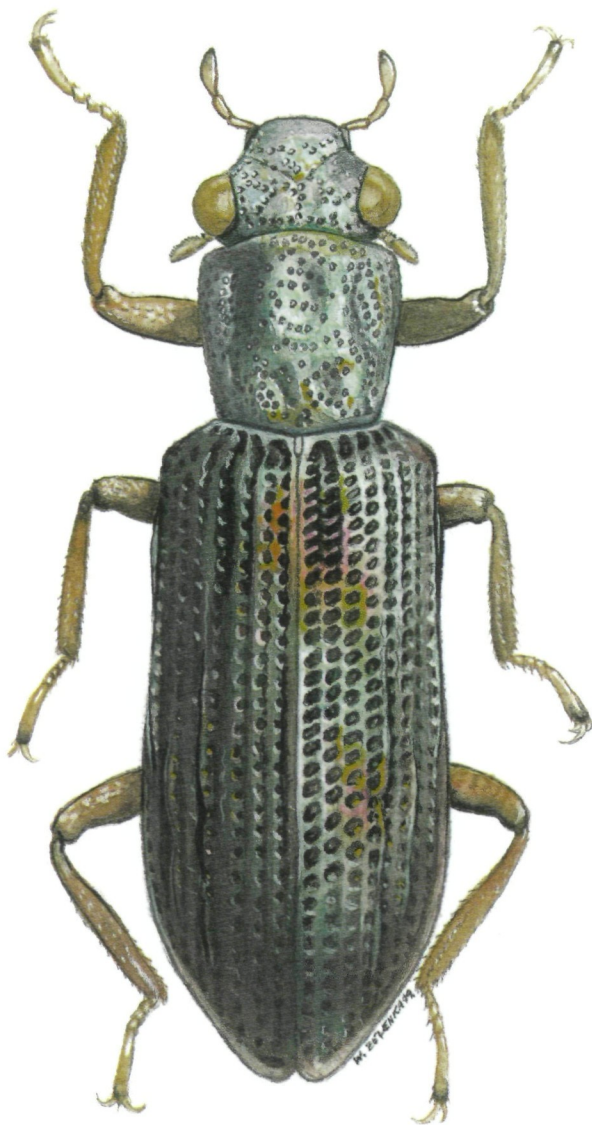
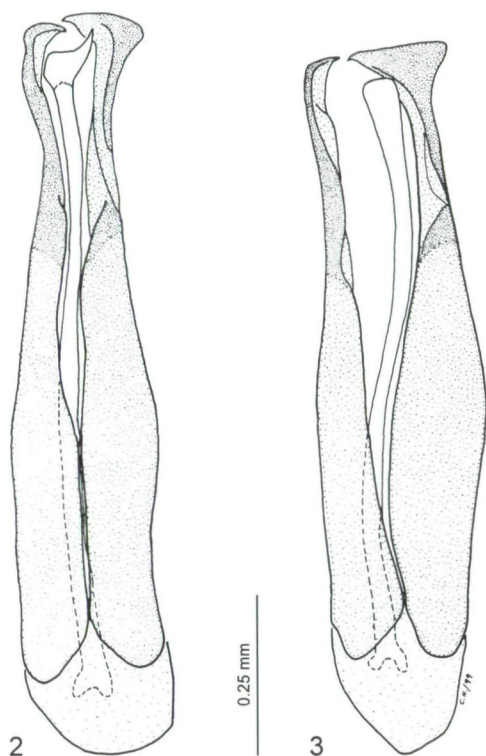


Fig. 1: Habitus of *H. tariqi* sp.n., particularly dark and metallic specimen.

Several females which apparently belong to this species were found coexisting with males of *H. tariqi* sp.n., but due to their general similarity with *H. nooreinus* BERGE HENEGOUWEN & SAINZ-CANTERO (with which *H. tariqi* coexisted in several localities) we do not designate these females as paratypes. A more detailed study of the females of the genus *Hydrochus* is in preparation by A. Gayoso (University of Santiago, Spain).

DIAGNOSIS: Habitus as in Fig. 1; 3.0 mm - 3.6 mm long, 1.0 mm - 1.2 mm wide. General colour brown, except for head usually black; with greenish metallic reflections in the head and pronotum, and greenish, bluish and golden metallic hue in the elytra.



Figs. 2 - 3: Aedeagus in dorsal view of 2) *H. tariqi* sp.n.; 3) *H. nooreinus* (traced from photographs).

Aedeagus as in Fig. 2. Apex of left paramere dilated, forming a roughly triangular plate. External side of left paramere regularly rounded, internal side sinuated. Right paramere bisinuous (ventral view), apex much smaller than in left paramere. Median lobe narrow, bisinuous; apex dilated, asymmetrical, with a pointed, flat expansion (not a flagellum) on the left.

VARIABILITY: The ground colour of pronotum and elytra can vary from pale brown to dark brown. The metallic hue of head, pronotum and elytra is very variable, and in some specimens is almost imperceptible.

DIFFERENTIAL DIAGNOSIS: *Hydrochus tariqi* sp.n. seems to be very closely related to *H. nooreinus* from south Spain (BERGE HENEGOUWEN & SAINZ-CANTERO 1992, VALLADARES & RIBERA 1999), from which it can be distinguished by the aedeagus, in particular by the shape of the apex of the median lobe (symmetrical in *H. nooreinus*) and the apex of the parameres (Fig. 3). The external morphology of *H. tariqi* is very similar to that of *H. nooreinus*, with only slight differences of no diagnostic value.

DISTRIBUTION: So far known only from four close localities in the province of Cádiz, although it is likely that the species will be found to have a wider distribution in southern Spain (and probably North Africa).

Head with coarse, deeply impressed punctures, irregularly arranged; micropunctures also irregularly distributed, many of the micropunctures with seta; apex of the last segment of maxillary palpi black. Pronotum with a large round discal depression, two smaller, round, contiguous depressions in the posterior half, and two elongated depressions along lateral sides, deeper anteriorly; surface with similar punctation and micropunctation as on head, coarse punctures more regularly distributed than on head, micropunctures foveolated, especially behind anterior margin. Scutellum subrectangular, elongated. Elytra with ten striae of large, deep punctures, regularly aligned, apical coarse punctures of striae 3 and 4, and 5 and 6 respectively fused, forming two elongated large foveae, apical puncture of stria 7 larger (than remaining punctures of stria 7), but not fused with the apical puncture of stria 8, which has the same size as the punctures of the rest of stria 8; intervals with foveate, setiferous micropunctures; 2nd, 4th, 6th and 8th interstriae raised, forming a carina, more pronounced in interstria 8, and in general better defined in the anterior part; interstria 4 with three, not very prominent, elongated tubercles, and interstria 6 with two tubercles situated in the spaces between the three tubercles of interstria 4; shoulders well defined. Legs with setiferous, foveate micropunctures.

ECOLOGY: All specimens were found in small streams. Two localities (including the type locality) and their water beetle fauna are described in more detail in JÄCH et al. (1999).

ETYMOLOGY: Named after Tariq ibn Ziyad, leader of the Berber navy that in April 711 arrived to the coast of Cádiz bringing civilisation into Iberia.

Hydrochus nooreinus BERGE HENEGOUWEN & SAINZ CANTERO

TYPE MATERIAL (examined): 3 paratypes (NHM): 1 ♂, "SPAIN: Jaen. \ 15 Kms. N. W. of Jaen. \ 400-500 m. 25.v.1967.", "M.E. Bacchus \ B. Levey \ B.M. 1968-20", "Hydrochus \ flavipennis Kust. [hw] \ Balfour-Browne det. \ 196", "Museon Den Haag \ Hydrochus \ nooreinus sp.n. [hw] \ det A. L. van Berge Henegouwen 1987", and yellow paratype label; 1 ♂, "SPAIN: Jaen \ Jaen-Valdepenas Rd. \ 18 kms. S of Jaen, \ 1000 mtrs. 25.v.1967", "M.E. Bacchus \ B. Levey \ B.M. 1968-20", "Hydrochus \ flavipennis Kust. [hw] \ Balfour-Browne det. \ 1974", "Museon Den Haag \ Hydrochus \ nooreinus sp.n. [hw] \ det A. L. van Berge Henegouwen 1987", and yellow paratype label; 1 ♀, "SPAIN: Granada, \ Iznalloz. \ 8-900 m. \ 24.v.1967", "M.E. Bacchus \ B. Levey \ B.M. 1968-20", "Hydrochus [hw] \ Balfour-Browne det. \ 1974", "Museon Den Haag \ Hydrochus \ nooreinus sp.n. [hw] \ det A. L. van Berge Henegouwen 1987", and yellow paratype label.

ADDITIONAL MATERIAL EXAMINED:

SPAIN: Albacete: Paterna del Madera: Arroyo de la Fuenfría, 5 exs., 6.IX.1997, 7 exs., 15.VI.1997, 5 exs., 16.III.1997, 2 exs., 2.III.1997, leg. I. Ribera (CRB); Villaverde de Guadalimar: Arroyo de la Puerta, 1 ex., 6.IX.1997, leg. I. Ribera (CRB). Granada: Quentar: tributary of river Aguas Blancas, 2 exs. 7.VI.1997, leg. I. Ribera (CRB). Cádiz: Arroyo del Pinar, 2 exs., 5.VII.1987, leg. C. Hernando & J. Fresneda (CHB); Grazalema, Arroyo del Gaidovar, 1 ex., 14.VI.1990, leg. M. Baena (CHB).

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