

**AN ENIGMATIC NEW SPECIES OF
ALLOPACHRIA ZIMMERMANN, 1924 FROM MALAYSIA
(COLEOPTERA: DYTISCIDAE)**

Michael Balke

Evolutionsbiologie, Institut für Zoologie, Freie Universität Berlin, Königin-Luise-Strasse 1-3, D-14195 Berlin, Germany. E-mail: mbalke@zedat.fu-berlin.de mbalke@jayapura.wasantara.net.id

Lars Hendrich

Berlin-Forschung, Freie Universität Berlin, Gärtnerstrasse 3, D-12207 Berlin, Germany. E-mail: -hendrich1@aol.com

ABSTRACT. - *Allopachria ullrichi*, new species, is described from Pahang, West Malaysia. The species has, unlike other representatives of the genus, a strikingly elongated, dorso-laterally flattened body. *Allopachria ullrichi* appears to have a basal position in the *Allopachria* phyletic tree.

KEY WORDS. - Malaysia, *Allopachria*, new species, Coleoptera, Dytiscidae.

INTRODUCTION

Exploration of the Indomalayan Dytiscidae fauna has quickly progressed during the past few years. Modern revisions are now available for several groups with others being under study. A higher taxon that was found to contain many highly localized, threatened, and previously unknown species is the tribe Hyphyrini of Hydroporinae (see e.g. Wewalka, 1997). This tribe was recently re-defined and systematically reviewed following the principles of phylogenetic systematics (Biström et al., 1997).

We have received four individuals of an enigmatic, unknown species of Dytiscidae collected in Malaysia from our colleague G. Ullrich (Lübeck, Germany) some years ago, which we at first could not assign to an existing tribe and genus. However, using the character set defined by Biström et al. (1997), we have now assigned this species to the tribe Hyphyrini and place it in the genus *Allopachria*.

SYSTEMATICS

Biström et al. (1997) used 26 adult characters for their cladistic analysis and we have coded the character states for the new *Allopachria* species here as follows:

Synapomorphies of *Allopachria* are: 11(1), prosternal process smooth in lateral view (shared with *Agnoshydrus*), and 17(1), elytron, humeral macula present. the presence of a basally undilated lateral pronotal bead (10(0)) and anteriorly unexpanded anterolateral elytral angle (16(0)) suggest a basal position of the new *Allopachria* within the genus.

The new *Allopachria* described below is the most flattened and elongated species of the genus, the representatives of which usually exhibit a rather globular habitus. Assuming morphology reflects habits, an interesting, and as yet unknown, biology may be predicted.

MATERIALS AND METHODS

The material studied here is deposited in the authors' collections (CBH), the Naturhistorisches Museum Wien, Vienna, Austria (NMW), and the Zoological Reference Collection, NUS, Singapore (ZRC). The drawings were made using a drawing tube attached to a WILD M8 (habitus) at 50x and a Leitz-Wetzlar binocular with an ocular grid net at 100x (genitalia).

Allopachria ullrichi, new species

(Figs. 1-4)

Material examined. - Holotype - male (NMW), MALAYSIA, Pahang, Kuala Lipis; coll. G. Ullrich, 26 Dec.1994.

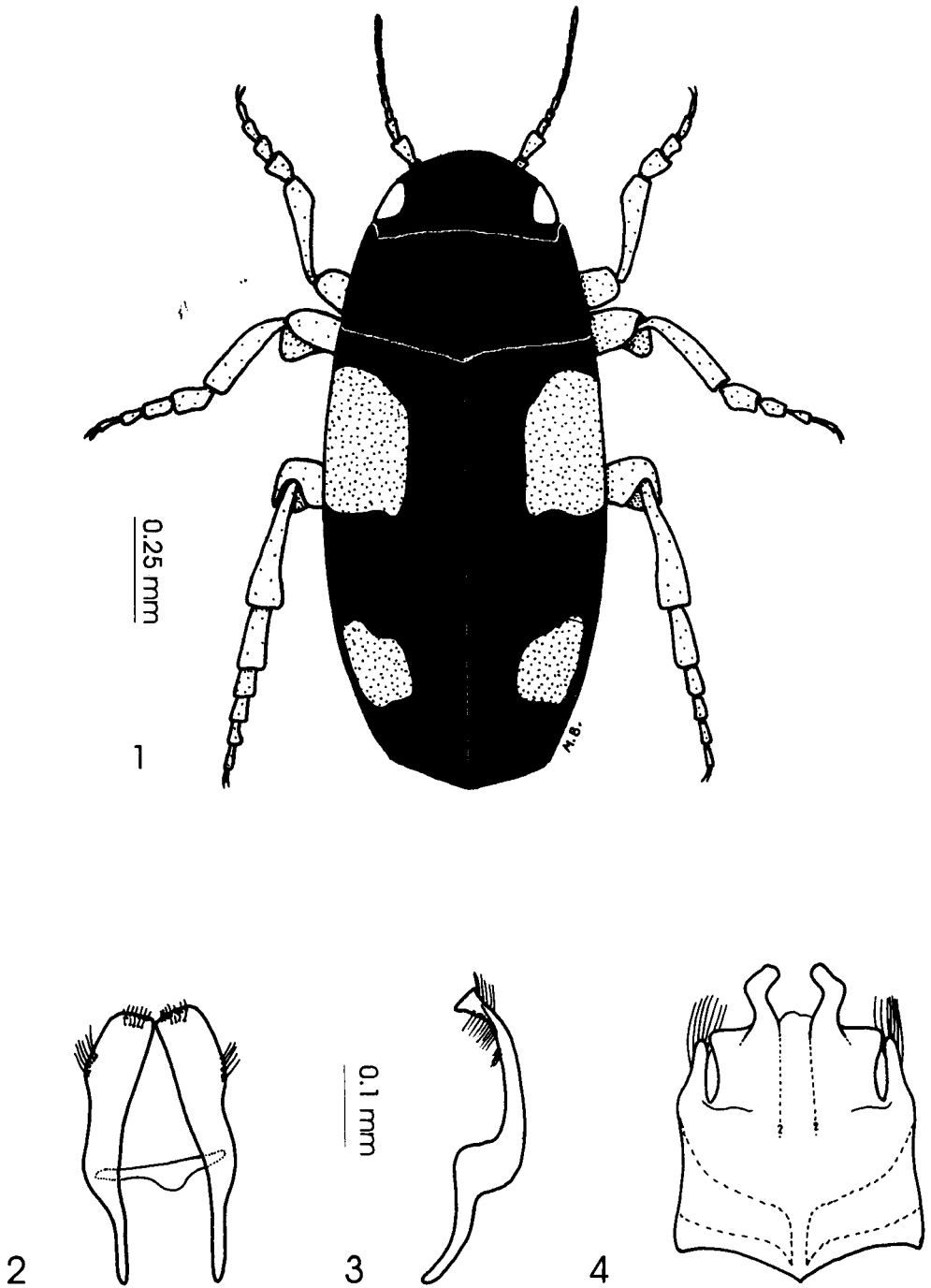
3 Paratypes (CBH, ZRC). - 1 male and 2 females, same data as the holotype.

Diagnosis. - Body elongate, apically truncate (Fig. 1); strongly flattened dorso-ventrally.

Length of body. 1.5 - 1.7 mm.

Colour. Dorsal side blackish with the following exceptions: a short line on both sides of the head, from the clypeus apically orientated, just above insertion of the antennae, dark reddish; a large humeral and a smaller subapical yellowish elytral spot, neither reaching the suture or epipleuron (Fig. 1). Appendages reddish; venter blackish.

Sculpture. Beetle shiny in dorsal view. Head with numerous transversely orientated shallow, short cuts; microreticulation of small polygonal cells postero-mediad; sparsely covered with small punctures. Pronotum with numerous transverse to diagonal, shallow cuts which are rather short, thus almost appearing like punctures; few larger punctures visible; antero-laterally with a groove of fused large setiferous punctures along anterior margin; antero-submedially one or two isolated large setiferous punctures. Elytron moderately densely covered with transverse, shallow, short cuts as on pronotum; few larger punctures visible; anteriorly and posteriorly on disc a shallow transverse groove derived through fusion of larger serial punctures.



Figs. 1-4. *Allopachria ullrichi*, habitus and coloration (1), median lobe of aedeagus in dorsal view (2), dito in lateral view (3), paramere (4).

Structures. Antennomeres 1 and 2 distinctly wider than the following ones. Pronotum with narrow lateral bead. Pro- and mesotarsus composed of four tarsomeres only due the reduction of tarsomere 4.

Male. Median lobe of aedeagus bifurcate (Fig. 2), apically and subapically setose (Figs 2, 3). Parameres fused, apically setose (Fig. 4). Postero-distal angle of meso- and metafemur greatly produced backwards, shovel-shaped (Fig. 1).

Female. Beetle submat in dorsal view due to presence of a very fine microreticulation; cuts on pronotum and elytra not evident, forming poorly defined meshes on the head. Postero-distal angle of meso- and metatibia simple.

Etymology. - Named for Dr G. Ullrich (Lübeck, Germany), collector of the species.

Ecology. - Unknown. The types were collected at light in front of a hotel on a hill at the edge of Kuala Lipis town. The vicinity was a rather dry cultivated area with houses. However, from the hill one has a wide view over the nearby river Tembeling and some relic forest areas. From observations on other species of *Allopachria* (Hendrich & Balke, 1995), and the extreme flattened body we suggest that *A. ullrichi* is an inhabitant of small forest streamlets, hiding between gravel and small stones at the edge. We have visited the region in April, 1997, but failed to find specimens of *A. ullrichi* despite intense collecting efforts, surveying a variety of lentic and lotic habitats.

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