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A new genus of Odacanthinae from New Guinea

(Insecta, Coleoptera, Carabidae)*

By Martin Baehr

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Crassacantha bidens, gen. nov., spec. nov. from the Vogelkop, Irian Jaya, western New Guinea is described. The genus *Crassacantha*, gen. nov. is presumably next related to the Oriental-Australian genus *Dicraspeda* Chaudoir.

Dr. M. Baehr, Zoologische Staatssammlung, Münchhausenstr. 21, D-81247 München, Germany.

Introduction

Within a sample of Carabid beetles, collected by A. Riedel on different occasions and in different parts of Irian Jaya (New Guinea), a specimen of Odacanthinae was found that could not be identified by use of any of the current generic tables of the Oriental-Australian Odacanthinae (Sloane 1917, 1923, Liebke 1938, Jedlicka 1963, Darlington 1968). Hence it belongs to a new genus. Since I have seen examples of almost all Australian and New Guinean and of most Oriental Odacanthine genera, the mentioned new genus is being described, although it is based on this unique specimen.

The Australian-New Guinean Odacanthine fauna is very rich in structurally rather plesiomorphic genera (for lists of genera and species see Darlington 1968, Moore et al. 1987) that exhibit at the same time certain apomorphic characters, e. g. the spinose elytral apices in several species of different genera, or the loss of the elytral striation in certain species. In particular spinose elytra seem a rather common character in the Odacanthinae from New Guinea (Darlington 1968) and may represent an adaptation to arboricolous habits.

However, the fauna of the Australian region presumably comprises a larger amount of plesiomorphic genera and species than the faunas of the other regions, and with the genus *Porocara* it includes even the most primitive odacanthine genus at all, both in morphology and ecology (Baehr 1986, in press). Highly evolved genera like *Colliuris*, *Casnoidea* and others, however, so common in the other regions, are comparatively rarer in the Australian region.

Measurements

Measurements have been made with a stereo microscope by use of an ocular micrometer. Length has been measured from apex of labrum to tip of elytra including the elytral spines. Hence, measurements may slightly differ from those of other authors, especially Darlington (1968).

* Results of the entomological explorations of A. Riedel in New Guinea 1991.

The holotype of the new species is presented to the Zoologische Staatssammlung, München, but is retained as permanent loan in the working collection of the author (ZSM-CBM).

Genus *Crassacantha*, gen nov.

Diagnosis. Genus of Odacanthinae, characterized by following characters: head large with very large eyes; distinct carina medially of the eyes present; mental tooth large, acute, triangular, of almost same length as wings of mentum; glossa elongate, apically slightly incised, bisetose; paraglossae narrow, apically free and much surpassing the glossa; lacinia large, at apex dentate; mandible elongate; antenna with 3rd and 4th antennomeres of equal length; prothorax short and wide, rather globular, with indistinct and posteriorly interrupted lateral margin; no deep and wide lateral channel on prothorax present; elytra short and wide, dorsally very convex; 4th tarsomere barely excised.

Etymology. The name is a combination of latin *crassa* (= thick, stout) and the genus name *Odacantha* and refers to the stout build of the single known species.

Type species: *Crassacantha bidens*, spec. nov. by monotypy.

Relationships. This new genus is presumably closely related to the genus *Dicraspeda* Chaudoir and is distinguished from the latter only by the more robust build, the even larger head, the dorsally convex, laterally not channeled prothorax, and the more convex elytra. It is more plesiomorphic with respect to the absence of the lateral channel of the prothorax, but more apomorphic with regard to the reduction of the lateral margin of the prothorax. It may be an offspring of a common ancestor of both, *Dicraspeda* and *Crassacantha*.

Crassacantha bidens, spec. nov.

Figs 1, 2

Types. Holotype: ♀, Irian Jaya, Manokwari-Pr., Membey, 800-1200 m, 31.8.1991, leg. A. Riedel (ZSM-CBM).

Diagnosis. With characters of the genus. Further characterized by completely black colour, glossy surface, dark appendages, and highly convex elytra with punctate though not impressed striae, dentate external apices, and a pair of dehiscent spines at the sutural angle.

Description

Measurements. Length: 7.0 mm. Ratios. Width/length of pronotum: 1.09; width of head/width of pronotum: 1.13; length/width of elytra: 1.51.

Colour. Upper and lower surfaces black. Mouth parts piceous. Antenna piceous, base of 3rd and 4th antennomeres dark reddish. Femora black, tibiae and tarsi piceous.

Head. Large, moderately convex. Eyes very large, laterally markedly projecting, orbits considerably less than half as long as eyes, fairly convex, forming an angle of c. 125° with the neck. Clypeus separated by a fine suture, labrum large, anteriorly straight, 6-setose. Palpi of average size. Mandibles elongate, at apex curved. Medially of eye with a strong ridge, medially of this with an irregularly sinuate furrow from apex of frons to about posterior two thirds of eye, this furrow forming a deep groove near clypeal suture. Frons slightly convex, surface regular. Neck separated from vertex by a deep, transverse furrow. Posterior supraorbital seta situated slightly in front of posterior margin of eye. Antenna presumably rather elongate, broken behind 2nd and 4th antennomeres, respectively. Surface of head including labrum without micrireticulation, impunctate and impilose, highly glossy.

Prothorax. Very convex, rather globose, slightly wider than long, surface convex. Widest part in front of middle, margin strongly rounded throughout, just in front of posterior angles faintly concave. Lateral border line fine, indistinct, posteriorly interrupted, situated well on disk, hence proepipleura and propisternum visible from above from apex to near base. Apex almost straight, anterior angles

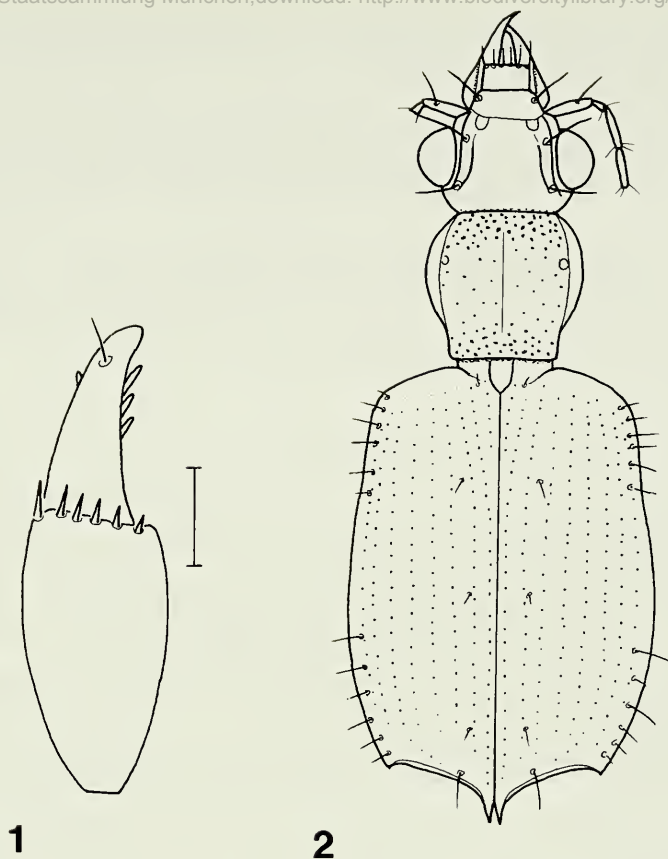


Fig. 1. *Crassacantha bidens*, gen. nov., spec. nov. ♀ stylomere 1 and 2. Scale: 0.1 mm.
Fig. 2. *Crassacantha bidens*, gen. nov., spec. nov. Habitus. Length: 7.0 mm.

rounded off, barely visible. Base faintly excised, posterior angles right, though at apex obtuse. Lateral margin without a channel. Surface with a faintly impressed median line that is abbreviated near apex and base, without well developed anterior and posterior transverse sulci. The anterior lateral seta situated slightly in front of widest part, pore slightly removed from border line, seta broken on either side. The posterior lateral seta and pore absent. Surface without microreticulation, apex, base and lateral parts with moderately sparse, coarse punctures, disk with very scattered, much finer punctures. Surface with some very weak transverse striae, highly glossy.

Elytra. Rather short and wide, posteriorly slightly widened, lateral margin in anterior third distinctly compressed. Surface markedly convex, behind middle with a wide, rather shallow, circular impression on either side. Shoulders wide, slightly oblique, shoulder angle slightly protruding, but obtuse. Marginal channel moderately wide, becoming wider and deeply sulcate near posterior angles. Apex oblique, slightly concave, outer apical angle short, acute, slightly projecting, inner angle forming an elongate, dehiscent spine opposite the suture. Apex with coarse border line. Striae marked by rows of moderately fine punctures, barely impressed, punctures becoming slightly finer towards apex, intervals extremely faintly convex. Third interval with three setiferous punctures, the first in middle between 2nd and 3rd striae, the median and apical ones adjacent to 2nd stria, punctures small, inconspicuous, setae rather inconspicuous. Surface without microreticulation, impunctate and impilose, highly glossy. Winged.

Lower surface. Proepisternum with rather sparse though coarse puncturation. Metepisternum elongate, almost $3 \times$ as long as wide. Abdominal sterna impunctate and impilose apart from a pair of

ambulatory setae on each sternite. Terminal sternum (in female) with two pairs of ambulatory setae.

Legs. Fairly elongate. 5th tarsomere rather densely setose on lower surface. 4th tarsomere but little excised at apex. Male anterior tarsus unknown.

♂ genitalia. Unknown.

♀ genitalia. Stylomere 1 with a row of c. 6 slightly ensiform setae at apex. Stylomere 2 elongate, almost straight, apex obtuse, not curved, with 3 ventral ensiform setae in apical half, 1 dorsal ensiform setae below apex, and short 1 nematiform seta originating in a groove. Lateral plate densely setose at apex.

Variation. Unknown.

Distribution. Vogelkop, western Irian Jaya. Known only from type locality.

Habits. Largely unknown. Collected in median altitude, presumably in rain forest.

Etymology. The name refers to the bidentate apex of the elytra.

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