

SPIXIANA	19	2	137-146	München, 01. Juli 1996	ISSN 0341-8391
----------	----	---	---------	------------------------	----------------

AUG 06 1996

HARVARD

Three new species of the genus *Dicraspeda* Chaudoir from New Guinea

(Insecta, Coleoptera, Carabidae, Odacanthinae)

By Martin Baehr

Baehr, M. (1996): Three new species of the genus *Dicraspeda* Chaudoir from New Guinea (Insecta, Coleoptera, Carabidae, Odacanthinae). – *Spixiana* 19/2: 137-146

Dicraspeda obsoleta, spec. nov. from central Irian Jaya, and *D. loebli*, spec. nov. and *D. ullrichi*, spec. nov., both from eastern and central Papua New Guinea are newly described. For comparison the male genitalia of the related species *D. brunnea* Chaudoir and *D. bispinosa* Darlington, respectively, are figured. A complete new key to the *Dicraspeda* species of New Guinea is given.

Dr. Martin 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 new species of the Oriental-Australian genus *Dicraspeda* Chaudoir was found that is closely related to the widespread *D. brunnea* Chaudoir. When I identified the very rich sample of carabids from the Muséum d'Histoire naturelle, Genève, that was collected by W. G. Ullrich in Papua New Guinea in 1979/80, I found two further new species closely related to *Dicraspeda bispinosa* Darlington.

Due to the structural diversity of the genus *Dicraspeda* (in the sense of Darlington 1968) it may be disputable whether the genus is really a taxonomic unit. Perhaps it should be divided again in different genera, as it was done before Darlington united with *Dicraspeda* the old genera *Philemonia* Liebke for the bispinose species with deeply excised fourth tarsomeres, and *Macrocentra* Chaudoir for the quadrispinose species.

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, in spinose specimens to the apex of the elytral spines. Hence, measurements may slightly differ from those of other authors, especially Darlington (1968).

Abbreviation of Collections mentioned in text

CBM	Collection M. Baehr, München
MCZ	Museum for Comparative Zoology, Cambridge/Mass.
MHNG	Muséum d'Histoire naturelle, Genève
NHMW	Naturhistorisches Museum, Wien

SMNS Staatliches Museum für Naturkunde, Stuttgart
 ZSM Zoologische Staatssammlung, München
 ZSM-CBM Zoologische Staatssammlung, München, as permanent loan in the working collection of author

Genus *Dicraspeda* Chaudoir

Dicraspeda Chaudoir, 1862, p. 300; Csiki 1932, p. 1536; Liebke 1938, p. 88; Darlington 1968, p. 210; Moore et al. 1987, p. 274.

Macrocentra Chaudoir, 1869, p. 205; Darlington 1968, p. 210.

Philemonia Liebke, 1938, p. 83; Darlington 1968, p. 210.

Type species: *Dicraspeda brunnea* Chaudoir, 1862, by monotypy.

Key to the New Guinean species of *Dicraspeda* Chaudoir

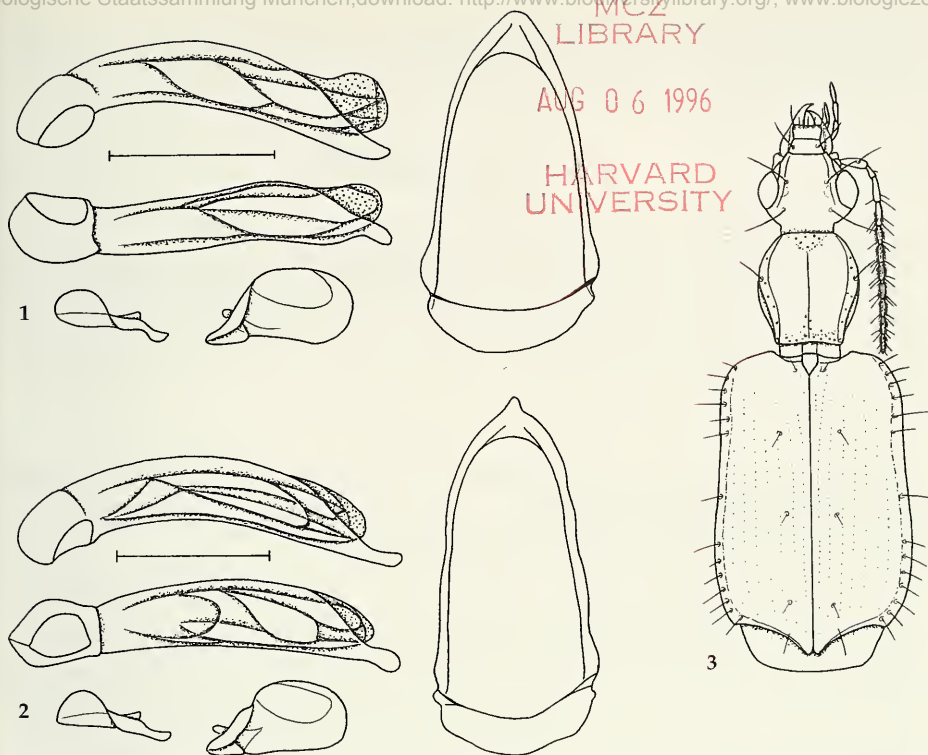
In parts, this key follows that of Darlington (1968, p. 211).

1. Apex of elytra not spinose or denticulate 2.
 – Apex of elytra spinose or denticulate 4.
2. 4th tarsomere of metatarsus emarginate for c. 1/3 of length only 3.
 – 4th tarsomere of metatarsus emarginate for more than 2/3 of length *longiloba* (Liebke)
3. Surface of elytra microreticulate, striae distinctly impressed, apex barely excised; aedeagus sinuate, apex not widened (Fig. 1) *brunnea* Chaudoir
 – Surface of elytra not microreticulate, striae not impressed, apex distinctly excised; aedeagus not sinuate, apex widened (Fig. 2) *obsoleta*, spec. nov.
4. Apex of elytra spinose or denticulate at sutural angle only 5.
 – Apex of elytra bispinose at sutural and lateral angles 8.
5. Body size smaller, <8.0 mm; 4th tarsomere of metatarsus emarginate for <1/2 of length only; sutural angle of elytra only denticulate *dubia* (Gestro)
 – Body size larger, >8.0 mm; 4th tarsomere of metatarsus emarginate for c. 2/3 of length; sutural angle of elytra denticulate or spinose 6.
6. Sutural angle of elytra only denticulate (Fig. 13); eyes not protruding, lateral margin of head including eye evenly convex (Fig. 10); aedeagus compact, large near apex, apex turned up, angle between lower surface of aedeagus and apex inconspicuous (Fig. 6) *ullrichi*, spec. nov.
 – Sutural angle of elytra spinose (Figs 11-12); eyes protruding, lateral margin of head including eyes not evenly convex (Figs 8, 9); aedeagus narrower near apex, apex not distinctly turned up, angle between lower surface of aedeagus and apex conspicuous or not (Figs 4, 5) 7.
7. Elytra slightly longer, ratio length/width >1.71, spines at apex longer (Fig. 11); microreticulation of elytra in females complete, in males distinct at least in apical half, intervals barely convex; aedeagus wider at apex, lower surface markedly bisinuate, angle between lower surface and apex conspicuous, outer surface rough (Fig. 4) *bispinosa* Darlington.
 – Elytra slightly shorter, ratio length/width c. 1.66, spines at apex shorter (Fig. 12); microreticulation of elytra in females visible only in apical half, in males almost absent, intervals distinctly convex; aedeagus narrower at apex, lower surface evenly concave, angle between lower surface and apex barely indicated, outer surface smooth (Fig. 5) *loebli*, spec. nov.
8. Colour black; tarsi sulcate-carinate above *quadrispinosa* (Chaudoir)
 – Colour green-purple; tarsi not sulcate-carinate above *violacea* (Sloane)

MCZ
LIBRARY

AUG 06 1996

HARVARD
UNIVERSITY



Figs 1,2. Genital ring, parameres, left side and lower surface of aedeagus. 1. *Dicraspeda brunnea* Chaudoir. 2. *D. obsoleta*, spec. nov. Scales: 0.5 mm.

Fig. 3. *Dicraspeda obsoleta*, spec. nov. Habitus. Length: 5.7 mm.

Dicraspeda brunnea Chaudoir

Fig. 1

Dicraspeda brunnea Chaudoir, 1862, p. 300; Csiki 1932, p. 1536; Liebke 1938, p. 89; Jedlicka 1963; p. 503 (as *Discrapeda*!); Darlington 1968, p. 211.

Diagnosis. Rather wide, depressed species with depressed, coarsely punctate pronotum and regularly striate elytra with coarsely punctate striae. Further distinguished from *D. obsoleta*, spec. nov. by head wider with markedly protruding eyes, pronotum narrower, elytra posteriorly distinctly widened with impressed and deeply punctate striae, presence of microreticulation on elytra, oblique shoulders with angulate shoulder angle, barely excised apex of elytra, and sinuate aedeagus with not widened apex.

For comparison with the new species described below the ratios of five measured specimens of *D. brunnea* are dealt with and the male genitalia are for the first time described and figured.

Measurements. Length: 6.0-6.5 mm. Ratios. Width/length of pronotum: 0.87-0.88; width of head/width of pronotum: 1.09-1.10; length/width of elytra: 1.50-1.51.

♂ genitalia (Fig. 1). Genital ring elongate, slightly narrowed to the obtusely rounded apex, with regular lateral margin of arms. Aedeagus elongate, laterally sinuate, ventral surface slightly concave, apex not widened, slightly turned to the right.

Material examined: 1♂, S.-Sulawesi, Ujung Padang, Bantimurung, 29.8.1990, leg. A. Riedel (CBM); 2♀♀, Philippines: Leyte, Visca N Baybay, 100-200 m, leg. Schawaller et al., 21.II.1991 (SMNS); 1♀, Malaysia, Sarawak, Mulu NP, 3.-6.3.1993, leg. H. Zettel (NHMW); 2♂♂, Indonesia, Lombok Is., Senaro, N-slope of Rinjani, 1100 m, 2.-5. Feb 1994, Bolm lgt. (CBM, SMNS).

Distribution: According to Darlington (1968) this species is widely distributed in the southeastern Oriental region and in the Australian region and was known to him from northern Australia, New Guinea, New Britain, Timor, Celebes, some Philippine islands, and Java. The records from Borneo (Sarawak) and Lombok are new though not unexpected and further enlarge the known range.

Dicraspeda obsoleta, spec. nov.

Figs 2, 3

Types. Holotype: ♂, Irian Jaya, Biak Is. Umg. Sepse, 3.10.1990, leg. A. Riedel (ZSM-CBM).

Diagnosis. Rather wide, depressed species with depressed pronotum, distinguished from the most closely related species *D. brunnea* Chaudoir by smaller head with less protruding eyes, wider, almost impunctate pronotum, rather parallel elytra with striae not impressed but indicated by very fine punctures in anterior half only, absence of microreticulation on elytra, shoulders not oblique but evenly rounded with convex shoulder angle, distinctly excised apex of elytra, and not sinuate aedeagus with widened, slightly club-shaped apex.

Description

Measurements. Length: 5.7 mm. Ratios. Width/length of pronotum: 0.94; width of head/width of pronotum: 1.03; length/width of elytra: 1.50.

Colour. Upper and lower surfaces black. Mouth parts and antenna light piceous, three basal antennomeres reddish-piceous. Legs yellowish, tibiae and tarsi feebly darker.

Head (Fig. 3). Moderately large, depressed. Eyes large, laterally moderately projecting, orbits slightly $>0.5\times$ as long as eyes, slightly convex, forming an angle of c. 135° with the neck. Clypeus separated by a fine suture, labrum large, anteriorly straight, 6-setose. Mandibles and palpi of average size. Medially of eye with a strong ridge, medially of this with an irregularly sinuate furrow from apex of frons to about posterior third of eye. Frons rather depressed, surface slightly irregular. Neck separated from vertex by a transverse furrow. Posterior supraorbital seta situated well behind posterior margin of eye. Antenna moderately elongate, barely surpassing base of pronotum, median antennomeres slightly $>2.5\times$ as long as wide. Surface of head apart from labrum without microreticulation, impunctate and impilose, highly glossy.

Prothorax (Fig. 3). Slightly longer than wide, surface faintly convex. Widest part slightly in front of middle, margin anteriorly evenly rounded, posteriorly faintly concave. Lateral border distinct, angulate throughout. Behind middle proepipleuron and proepisternum narrowly visible from above. Apex almost straight, anterior angles rounded off, barely indicated. Base faintly excised, posterior angles right, though at apex obtuse. Inner margin with a wide channel that diminishes towards apex and narrows towards base. Inner border of the channel marked by a strong ridge. Surface with a distinctly impressed median line, a rather shallow, v-shaped anterior sulcus, and a barely impressed transverse basal sulcus. Anterior marginal seta situated at widest part, posterior marginal pore within the posterior angle, both posterior setae broken. Microreticulation absent. Surface impunctate, only anterior and posterior sulcus and lateral channel with scattered coarse punctures, and with some weak transverse striae, glossy.

Elytra (Fig. 3). Rather short and wide, posteriorly barely widened, though lateral margin in anterior third faintly compressed. Surface slightly convex, in middle depressed, in anterior third with a very shallow, oblique impression on either side. Shoulders wide, evenly rounded, shoulder angle almost rounded off. Marginal channel rather wide throughout, distinctly crenulate. Apex oblique, perceptibly concave. Outer apical angle projecting but obtuse, inner angle rounded, apex with coarse border line. Striae marked by rows of very fine punctures, virtually not impressed, punctures becoming even finer towards apex, intervals absolutely depressed. Third interval with three setiferous punctures, the first adjacent to 3rd stria, the median and apical ones adjacent to 2nd stria. Surface impunctate and impilose, glossy, in anterior two thirds without microreticulation, though very superficial microreticulation present in apical third, consisting of transverse meshes. Fully winged.

Lower surface. Proepisternum with rather sparse though very coarse punctation. Metepisternum elongate, almost $3\times$ as long as wide. Abdominal sterna impunctate and impilose apart from a pair of ambulatory setae each segment. Terminal sternum apparently with one pair of ambulatory setae.

Legs. Medium sized. 5th tarsomer setose on lower surface. 4th tarsomer little excised at apex. Male

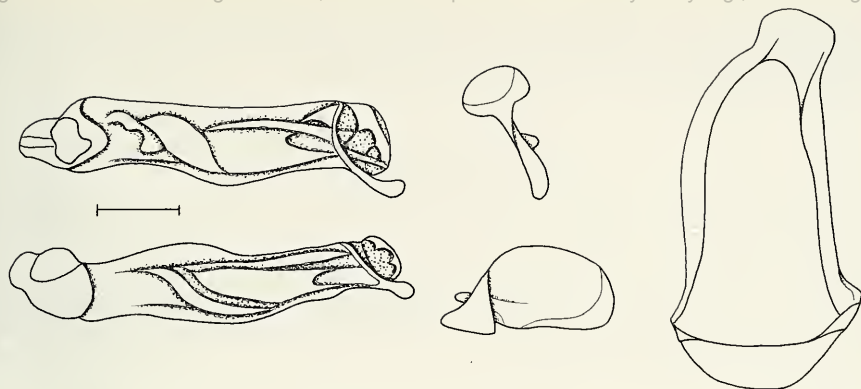


Fig. 4. *Dicraspeda bispinosa* Darlington. Genital ring, parameres, left side and lower surface of aedeagus. Scale: 0.5 mm.

anterior tarsus not enlarged, with a double row of adhesive hairs on 1st-3rd tarsomeres.

♂ genitalia (Fig. 2). Genital ring elongate, almost parallel, with acute apex and slightly irregular lateral margin of arms. Aedeagus elongate, laterally slightly curved, but not sinuate, ventral surface gently concave, apex slightly widened and club-shaped, not turned laterally.

♀ genitalia. Unknown.

Variation. Unknown.

Distribution. Biak Island, western Irian Jaya. Known only from type locality.

Habits. Largely unknown. The holotype was most probably collected in somewhat disturbed low-land rain forest.

Etymology. The name refers to the obsolete striation of the elytra.

Relationships. This species is certainly closely related to the widespread Oriental-Australian species *D. brunnea* Chaudoir and hence belongs to *Dicraspeda* in the original sense, whereas the remaining species from New Guinea and Australia are in various respects different and generally more apomorphic, and actually may belong to different genera.

Dicraspeda bispinosa Darlington

Figs 4, 8, 11

Dicraspeda bispinosa Darlington, 1968, p. 212, fig. 129.

Diagnosis. Rather narrow, convex species with unispinose elytral apex, distinguished from the most closely related species *D. loebli*, spec. nov. by longer elytra, longer apical spines (Fig. 11), more accentuate microreticulation of elytra in both sexes, less convex elytral intervals, and in apical half markedly rough aedeagus with wide apex and with lower surface remarkably bisinuate.

For comparison with the new species described below the ratios of 7 measured specimens of *D. bispinosa* (the type series from MCZ) are dealt with and the male genitalia are for the first time described and figured.

Measurements. Length: 8.5-8.8 mm. Ratios. Width/length of pronotum: 0.95-0.99; width of head/width of pronotum: 1.11-1.15; length/width of elytra: 1.71-1.78.

♂ genitalia (Fig. 4). Genital ring elongate, very stout, slightly asymmetric, slightly narrowed to the wide, rounded apex, with very strong lateral arms. Aedeagus moderately elongate, laterally sinuate, lower surface deeply bisinuate, apex short, thin, knob-like, slightly upturned and turned left, with distinct angle on lower surface between aedeagus and apex. Orificium short, with large sclerite on right side. Apical part of aedeagus rough with many small tubercles.

♀ genitalia. Rather similar to that of *D. ullrichi*, spec. nov.

Material examined: 4♂♂, 3♀♀ Dobodura, Papua N. G. Mar-July 1944 Darlington, holotype!, paratypes! (MCZ).

Distribution: According to Darlington (1968) this species is so far known only from a rather restricted area in northeastern and central eastern Papua New Guinea.

Dicraspeda loebli, spec. nov.

Figs 5, 9, 12

Types. Holotype: ♂, Papua Nlle Guinée, Morobe II 81 env. de Gurakor, W. G. Ullrich (MHNG). - Paratype: 1♀, Papua Nlle Guinée W. G. Ullrich, IV 79 PNG/WHPProv. Bayer/Rokina (CBM).

Diagnosis. Rather narrow, convex species with unispinose elytral apex, distinguished from the most closely related species *D. bispinosa* Darlington by shorter elytra, shorter spines, less accentuate microreticulation of elytra in both sexes, more convex elytral intervals, and smooth aedeagus with narrow apex and evenly concave lower surface.

Description

Measurements. Length: 8.2-9.0 mm. Ratios. Width/length of pronotum: 0.97; width of head/width of pronotum: 1.12-1.18; length/width of elytra: 1.66.

Colour. Upper and lower surfaces of fore body black, elytra, meso- and methathorax, and abdomen dark piceous. Labrum, palpi, and antenna light reddish. Legs reddish-piceous, apex of tibiae and tarsi feebly lighter.

Head (Fig. 9). Large, slightly wider than pronotum, upper surface slightly convex, though rather uneven. Eyes rather small, by far shorter than orbits, laterally projecting, distinctly interrupting the lateral curve. Orbits convex, $<1.5\times$ as long as eye, forming a very wide angle with neck. Clypeus separated by a fine suture that is shortly interrupted in middle. Labrum large, anteriorly faintly concave, 6-setose. Mandibles and palpi of average size, mandibles anteriorly suddenly incurved. Labium with narrow, very elongate tooth. Medially of eye with a strong ridge. Frons in middle near clypeal suture with a horseshoe-shaped impression, laterally on either side with a strongly sinuate, irregular furrow that ends in a deep, elongate groove close to the supraorbital ridge. Medially of this groove with a deep, circular impression on either side. Neck separated from vertex by a shallow, transverse furrow. Posterior supraorbital seta situated far behind posterior margin of eye. Antenna elongate, surpassing base of pronotum by about two antennomeres, median antennomeres c. $3.5\times$ as long as wide. Surface of head apart from labrum without micrireticulation, impunctate and impilose, highly glossy.

Prothorax. Slightly longer than wide, rather parallel, surface rather convex. Widest part slightly in front of middle, margin gently rounded, posteriorly faintly concave. Lateral border prominent, raised throughout and with deep channel. Proepipleura and proepisternum narrowly visible from above. Apex almost straight, unbordered, anterior angles rounded off, barely visible. Base straight, unbordered, posterior angles right though obtuse. Median line deeply impressed, not attaining apex, anterior sulcus shallow, v-shaped, transverse basal sulcus barely impressed, both sulci coarsely punctate. Both marginal setae absent. Surface without microreticulation, impunctate, only anterior and posterior sulcus, lateral channel, and basal third with scattered coarse punctures, in middle with some weak transverse striae, glossy.

Elytra (Fig. 12). Large in comparison with fore body, fairly elongate, posteriorly slightly widened, lateral margin in anterior third faintly compressed. Surface markedly convex. Shoulders wide, evenly rounded, with small, obtuse angle. Marginal channel narrow. Apex oblique, deeply concave. Outer apical angle projecting but obtuse, sutural angle shortly spined, spines slightly dehiscent, apex with coarse border line. Striae deeply impressed, coarsely, very regularly punctate, intervals distinctly convex. Third interval with three setiferous punctures, the anterior more close to 3rd stria, the median and apical ones adjacent to 2nd stria. Surface in male without microreticulation, in females with highly superficial microreticulation only in apical third, consisting of irregular, transverse meshes. Intervals impunctate and impilose, glossy. Winged.

Lower surface. Proepisternum and mesothorax with dense and coarse punctation. Metepisternum elongate, c. $2.5\times$ as long as wide. Metathorax and abdominal sterna impunctate and impilose apart from a pair of ambulatory setae each segment. Terminal sternum in male with one pair, in females

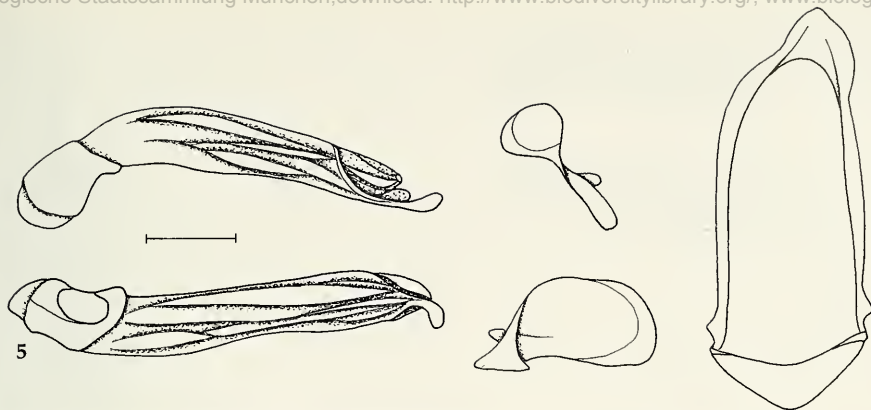


Fig. 5. *D. löbli*, spec. nov. Genital ring, parameres, left side and lower surface of aedeagus. Scale: 0.5 mm.

with two pairs of ambulatory setae.

Legs. Elongate. 5th tarsomer setose on lower surface. 4th tarsomer deeply ($>1/2$ of length) excised. Male anterior tarsus not enlarged, with a double row of adhesive hairs on 1st-3rd tarsomeres.

♂ genitalia (Fig. 5). Genital ring narrow and elongate, markedly parallel, apex rather wide, lateral arms moderately strong, base markedly triangular. Aedeagus elongate, narrow, laterally barely sinuate, lower surface regularly concave, apex fairly elongate, thin, slightly knob-like, slightly upturned and markedly turned left, without angle on lower surface between aedeagus and apex. Orificium elongate, with rather small sclerite on right side. Apical part of aedeagus smooth.

♀ genitalia. Rather similar to that of *D. ullrichi*, spec. nov.

Variation. Some variation noted in size of eyes which are slightly larger and more protruding in the female paratype, and in size of punctures of striae which are likewise slightly larger in the female paratype.

Distribution. Eastern and central Papua New Guinea.

Habits. Unknown.

Etymology. Named in honour of Dr. Ivan Löbl of the Museum of Genève who kindly made available the Ullrich collection to me.

Relationships. This species is certainly very closely related to *D. bispinosa* Darlington and also to *D. ullrichi*, spec. nov. and would belong to *Philemonia* when the genus *Dicraspeda* would be acknowledged in its restricted sense.

Dicraspeda ullrichi, spec. nov.

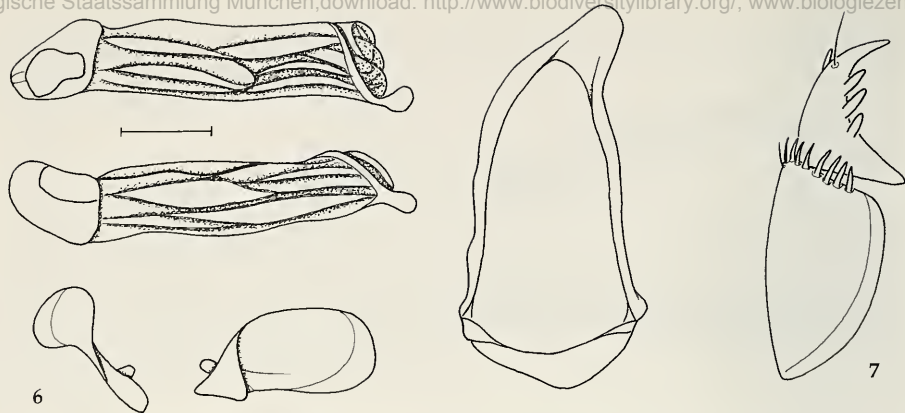
Figs 6, 7, 10, 13

Types. Holotype: ♂, Papua-N.Guinea Mainyanda I.1980 25 km W Bulolo W. G. Ullrich 600 m (MHNG). - Paratypes: 3♀, Papua Nlle Guinée W. G. Ullrich, 16 IX 79 PNG/Morobe Umg. Mumeng Wampu River (CBM, MNHG).

Diagnosis. Rather narrow, convex species with denticulate elytral apex, distinguished from the most closely related species *D. bispinosa* Darlington and *D. loebli*, spec. nov. by denticulate rather than spinose sutural apex, smaller eyes that do not interrupt the outline of head, and smooth and near apex distinctly widened aedeagus with apex considerably turned up.

Description

Measurements. Length: 8.0-8.6 mm. Ratios. Width/length of pronotum: 0.94-0.96; width of head/width of pronotum: 1.04-1.08; length/width of elytra: 1.63-1.65.



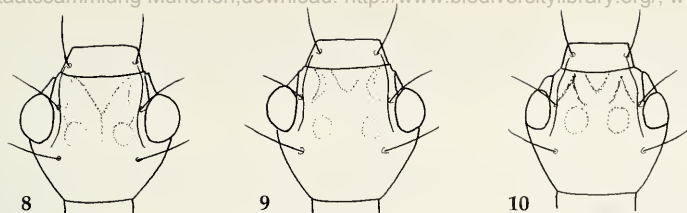
Figs 6-7. *D. ullrichi*, spec. nov. 6. Genital ring, parameres, left side and lower surface of aedeagus. Scale: 0.5 mm. 7. Stylomeres. Scale: 0.2 mm.

Colour. Upper and lower surfaces of fore body black, elytra, meso- and methathorax, and abdomen dark piceous. Labrum, palpi, and antenna light reddish. Legs reddish-piceous, apex of tibiae and tarsi feebly lighter.

Head (Fig. 10). Large, slightly wider than pronotum, upper surface slightly convex, though rather uneven. Eyes comparatively small, by far shorter than orbits, laterally barely projecting, not interrupting the lateral outline of head. Orbits convex, c. 1.5× as long as eye, forming a very wide angle with neck. Clypeus separated by a fine suture that is shortly interrupted in middle. Labrum large, anteriorly faintly concave, 6-setose. Mandibles and palpi of average size, mandibles anteriorly suddenly incurved. Labium with narrow, very elongate tooth. Medially of eye with a strong ridge. Frons in middle near clypeal suture with a horseshoe-shaped impression, laterally on either side with a markedly sinuate, irregular furrow that ends in a deep, elongate groove close to the supraorbital ridge. Medially of this groove with a deep, circular impression on either side. Neck separated from vertex by a shallow, transverse furrow. Posterior supraorbital seta situated far behind posterior margin of eye. Antenna elongate, surpassing base of pronotum by about two antennomeres, median antennomeres c. 3.5× as long as wide. Surface of head apart from labrum without microreticulation, impunctate and impilose, highly glossy.

Prothorax. Slightly longer than wide, rather parallel, surface fairly convex. Widest part slightly in front of middle, margin gently rounded, posteriorly faintly concave. Lateral border prominent, raised throughout and with deep channel. Proepipleura and proepisternum narrowly visible from above. Apex almost straight, unbordered, anterior angles rounded off, barely visible. Base straight, unbordered, posterior angles right though obtuse. Median line deeply impressed, not attaining apex, anterior sulcus shallow, v-shaped, transverse basal sulcus barely impressed, both sulci coarsely punctate. Both marginal setae absent. Surface without microreticulation, impunctate, only anterior and posterior sulcus, lateral channel, and basal third with scattered coarse punctures, in posterior half with some weak transverse striae, glossy.

Elytra (Fig. 13). Large in comparison with fore body, fairly elongate, posteriorly slightly widened, lateral margin in anterior third faintly compressed. Surface markedly convex. Shoulders wide, evenly rounded, with small, obtuse angle. Marginal channel narrow. Apex oblique, deeply concave. Outer apical angle projecting but obtuse, sutural angle denticulate, apex with coarse border line. Striae deeply impressed, coarsely, very regularly punctate, intervals distinctly convex. Third interval with three setiferous punctures, the anterior more close to 3rd stria, the median and apical ones adjacent to 2nd stria. Surface in male without microreticulation, in females with highly superficial microreticulation only in apical third, consisting of irregular, transverse meshes. Intervals impunctate and impilose, glossy. Winged.



Figs 8-10. Head. 8. *Dicraspeda bispinosa* Darlington. 9. *D. löbli*, spec. nov. 10. *D. ullrichi*, spec. nov.



Figs 11-13. Apex of elytra. 11. *Dicraspeda bispinosa* Darlington. 12. *D. löbli*, spec. nov. 13. *D. ullrichi*, spec. nov.

Lower surface. Proepisternum and mesothorax with dense and coarse puncturation. Metepisternum elongate, c. 2.5x as long as wide. Metathorax and abdominal sterna impunctate and impilose apart from a pair of ambulatory setae each segment. Terminal sternum in male with one pair, in females with two pairs of ambulatory setae.

Legs. Elongate. 5th tarsomer setose on lower surface. 4th tarsomer very deeply (>1/2 of length) excised. Male anterior tarsus not enlarged, with a double row of adhesive hairs on 1st-3rd tarsomeres.

♂ genitalia (Fig. 6). Genital ring elongate, fairly stout, slightly asymmetric, slightly narrowed to the moderately wide, rounded apex. Aedagus moderately elongate, laterally little sinuate, lower surface very gently bisinuate, apex short, thin, knob-like, distinctly upturned but barely turned left, with feeble angle on lower surface between aedeagus and apex. Orificium very short, with large sclerite on right side. Apical part of aedeagus smooth.

♀ genitalia (Fig. 7). Stylomere 2 rather elongate, slightly curved, with acute apex; with 3 stout ventral ensiform setae, a large dorsal ensiform seta, and a rather short nematiform seta raising from a groove in apical third. Base of stylomere 1 medially with 5-6 stout ensiform setae, laterally with additional 3 more slender, rather nematiform setae.

Variation. Very little variation noted.

Distribution. Eastern central Papua New Guinea.

Habits. Unknown.

Etymology. Named in honour of the collector W. G. Ullrich.

Relationships. This species is certainly closely related to *D. bispinosa* Darlington and *D. löbli*, spec. nov. and would belong to *Philemonia* when the genus *Dicraspeda* would be acknowledged in its restricted sense.

Due to their high external similarity the three taxa *D. bispinosa*, *D. löbli*, and *D. ullrichi* could be regarded as members of a superspecies, but their partly sympatric distribution and the rather important differences of the structure of the male genitalia do not support this idea. While in certain external features (shape of head, elytral spines) *D. bispinosa* and *D. löbli* seem to be more similar (Figs 8, 9, 11, 12), in structure of aedeagus *D. bispinosa* and *D. ullrichi* are more alike (Fig. 4, 6). The actual relationships of the three species are, therefore, still uncertain.

Certainly the species of the *bispinosa*-group are more advanced in many external and genitalic respects than those of the *brunnea*-group that constitute the most generalized members of the genus. In a future revision of all species of *Dicraspeda* including the Australian ones, it might be necessary to subdivide the genus again and to reintroduce the old generic names *Philemonia* Liebke and *Macrocentra* Chaudoir at least as subgeneric names.

Acknowledgements

My sincere thanks are due to Dr. I. Löbl (Genève), Dr. P. D. Perkins (Cambridge, Mass.), Mr. A. Riedel (Friedberg), Dr. W. Schawaller (Stuttgart), and Dr. H. Schönmann (Wien) for kind loan of types and material.

Literature

- Chaudoir, M. de 1862. Matériaux pour servir à l'étude des Carabiques. 3^e partie. - Bull. Soc. Imp. Nat. Moscou 35: 275-320
- Csiki, E. 1932. Coleopterorum Catalogus. Pars 124, Harpalinae VII: 1279-1598. - W. Junk, Berlin
- Darlington, P. J. Jr. 1968. The Carabid beetles of New Guinea. Part III. Harpalinae continued. Perigonini to Pseudomorphini. - Bull. Mus. Comp. Zool. 137: 1-253
- Liebke, M. 1938. Denkschrift über die Carabiden-Tribus Colliurini. - Festschrift für Prof. Dr. Embrik Strand 4: 37-141
- Moore, B. P., T. A. Weir & J. E. Pyke. 1987. Rhysodidae and Carabidae. In: Zoological Catalogue of Australia, 4: 17-320. - Austr. Governm. Publ. Serv., Canberra

ZOBODAT - www.zobodat.at

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: [Spixiana, Zeitschrift für Zoologie](#)

Jahr/Year: 1996

Band/Volume: [019](#)

Autor(en)/Author(s): Baehr Martin

Artikel/Article: [Three new species of the genus *Dicraspeda* Chaudoir from New Guinea \(Insecta, Coleoptera, Carabidae, Odacanthinae\) 137-146](#)