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Two new species of *Dasynus* BURMEISTER (Heteroptera: Coreidae: Dasynini) from Australia

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ABSTRACT. *Dasynus baehri* sp. n. and *Dasynus cephalotus* sp. n. from Australia are described and compared with *Dasynus fuscescens* (Distant). Adult dorsal habitus, and drawings of head, pronotum, and male genital capsule are included.

KEY WORDS: Hemiptera, Heteroptera, Coreidae, Dasynini, *Dasynus,* two new species, Australia..

INTRODUCTION

The tribe Dasynini is characterized by having the femora unarmed, antenniferous tubercles widely spaced, prominent tylus and jugum, antennal segment IV longer than or subequal to I, eyes hemispheric, protruding, hind femur longer, reaching middle third of abdomen, and frequently the abdominal spiracle situated before the middle of the sternum (Dolling 1974).

In Australia the tribe is represented by six genera and nine species (CASSIS & GROSS 2002, BRAILOVSKY 2002): *Amblypelta brevicornis* BROWN, 1958, *Amblypelta lutescens,* DISTANT, 1911, *Amblypelta nitida* STÅL, 1873, *Aulacosterjanus serrulatus* BRAILOVSKY, 2002, *Aulacosternum nigrorubrum* DALLAS, 1852, *Aulacosternum punctipes* STÅL 1873, *Dasynus fuscenscens* DISTANT, 1911, *Jalina ocularis* DISTANT, 1911, and *Piramurana cyclops* DISTANT, 1911.

This paper is a further contribution to the knowledge of this tribe and provides the description of two new species. However, these new taxa, as well as the majority of other Australasian coreids comprise a phytophagous group, never abundantly collected, and for that, their distributional data are limited.

Abbreviations

AMUS – The Australian Museum, Sydney, Australia; ANIC – Australian National Insect Collection, Canberra, Australia; DPI – Department of Primary Industries, Mareeba, Australia; QMBA – Queensland Museum, Brisbane, Australia; UNAM- Instituto de Biología, Universidad Nacional Autónoma de México; UQIC – University of Queensland, Insect Collection, Brisbane, Australia.

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SYSTEMATICS

Dasynus baehri sp. n.

(Figs 1, 5, 6)

Diagnosis

The new species is closely allied to *Dasynus fuscescens* (DISTANT 1911) in having the antennal segment IV the longest, III the shortest, and II longer than I, the antennal segment IV brownish with basal third yellowish ochraceous, the head pentagonal with tylus clearly projected in front of the antenniferous tubercle, and the abdominal spiracles III to VII closer to the anterior border of the sterna.

In *D. baehri* sp. n., the humeral angles of the pronotum are projected into medium sized and acute spine, pointing outward (Fig. 1), the propleura, mesopleura, metapleura and abdominal sterna III to VI with black large discoidal spot, the rostrum longer, reaches the posterior margin of abdominal sternite III, and the posteroventral edge of male genital capsule trilobulate, with lateral lobes rounded, and central lobe elongate, and apically subacute (Fig. 5). In *D. fuscescens* the humeral angles are projected into small acute spine, pointing backward (Fig. 3), the propleura, mesopleura, metapleura and abdominal sterna III to VI without black discoidal spot, the rostrum shorter, not extending beyond the posterior margin of mesosternum or anterior margin of metasternum, and the posteroventral edge of male genital capsule simple with a median notch, sometimes hard to see (Fig. 4).

Description

Male. Dorsal coloration. Yellowish ochraceous with granules and punctures pale brown to black and following areas black: head with one central longitudinal stripe running between the ocelli, the inner face of postocular tubercle, ocellar tubercle, and anterolateral border of pronotum including the spines and nodules; antennal segments I to III yellowish ochraceous with apical joint of I and apical third of II and III brownish; antennal segment IV brownish with basal third yellowish ochraceous; apex of scutellum pale yellow; claval and corial veins, and costal border of corium pale yellow; hemelytral membrane dark brown; connexivum pale yellow; dorsal abdominal segments II to VI pale yellow, and VII black with lateral margins pale yellow.

Ventral coloration. Pale yellow with following areas black: apex of rostral segment IV, and large discoidal spot on propleura, mesopleura, metapleura, and abdominal sternite III to VI; rim of abdominal spiracle pale yellow.

Structure. Head wider than long across eyes, elongate, pentagonal, not declivous, and dorsally flat, to barely convex; tylus projected beyond antenniferous tubercle and juga, with apex rounded; juga, mandibular plate, and sides of head in front of eyes unarmed; antenniferous tubercle unarmed, never contiguous; space between antenniferous tubercles 1.5 times wider than one tubercle; antennae shorter than total body length; antennal segment I slender, thickest, slightly curved outward, and longer than maximum length of head; segments II and III cylindrical and slender, and segment IV fusiform; antennal segment IV the longest, III the shortest, and II longer than I; ocelli close to eyes, raised; preocellar pit deep; eyes hemispheric, protruding, and removed from the pronotum; postocular tubercle barely exposed, indistinct; buccula short, raised, obliquely straight, entire, unarmed, and not projecting beyond antenniferous tubercle; rostrum slender, reaches posterior margin of abdominal sternite III; rostral segment IV the longest, III the shortest, and I subequal to II.

Thorax. Pronotum. Wider than long, trapeziform, slightly declivous; collar present; frontal angles obtuse; humeral angles thick at base, tapering into medium sized and acute spine, pointing outward; anterior margin smooth; anterolateral margins obliquely straight, emarginated, and spinate, each spine small and robust; posterolateral margins sinuate with small and stout spines; posterior margin straight, smooth; calli indistinct, not raised, with deep submedial longitudinal furrow; triangular process absent (Fig. 1). Ventrally without longitudinal medial sulcus; metathoracic peritreme raised; anterior lobe auriculiform, and posterior lobe small, subacute.

Legs. Unarmed; tibiae terete, and sulcate. Scutellum. Triangular, as long as wide, and apically subacute; disc flat, with lateral margins emarginated. Hemelytra. Macropterous, extending beyond the apex of the last abdominal segment; costal margin emarginate; apical margin obliquely straight, with apical angle rounded, and extending beyond the middle third of the hemelytral membrane.

Abdomen. Elongate, parallel sided; connexivum raised above tergum, with posterior angles not produced into spines or tubercles; ventrally without longitudinal medial sulcus; abdominal spiracle closer to anterior border. Genitalia. Male genital capsule. Posteroventral edge trilobulate, lateral lobes rounded, and central lobe elongate, medium sized, and apically subacute (Fig. 5).

Integument. Body surface rather dull, and almost glabrous. Dorsal surface of head densely granulate, except the apical third of tylus; pronotal disk, scutellar disk, clavus, and corium densely punctured, with small and large coarse punctures; connexivum smooth; ventrally smooth except acetabulae, great portion of the propleura, and posterior margin of mesopleura and metapleura which are densely punctured.

Female. Coloration. Similar to male holotype. Connexival segments VIII and IX, and dorsal abdominal segments VIII and IX yellowish ochraceous with two black spots and segment VIII; genital plates pale yellow. Genitalia. Abdominal sternite VII with plica and fissura; gonocoxae I enlarged antero-posteriorly, in caudal view closed, in lateral view weakly convex; paratergite VIII triangular with spiracle visible; paratergite IX squarish, wider than VIII.

Measurements (in mm). Male and female respectively: body length 16.45, 20.82; head length 2.08, 2.32; head width across eyes 2.20, 2.56; interocular space 1.10, 1.32; interocellar space 0.50, 0.60; antennal segments: I, 3.41, 3.90; II, 3.96, 4.52; III, 3.16, 3.65; IV, 5.33, 6.32; pronotum length 2.96, 3.88; pronotum width across humeral angles 5.40, 7.18; scutellar length 2.00, 2.52; scutellar width 2.00, 2.56.

Type material

Holotype male: [Australia: North Queensland]: Upper Daintree R, via Daintree, 27-XII-1964, G. Monteith (UQIC).

Paratypes: 1 male: [Australia: Queensland]: Cape York Pen., Bertie Ck., 11º 50'S 142º 30'E, 13-III-1992, G. Cassis (AMUS). 1 male: [Australia: Queensland]: Cape York Pen., 7 km NE of 3 ways to Captain Billy Landing, 11º 41'S 142º41'E, 12-III-1992, G. Cassis (UNAM). 1 male: [Australia, North Queensland]: Cape York Pen., dividing range, 15 km W of Captain Billy Creek, 11º 40' S 142º 45'E, 4-9-VII-1975, G. B. Monteith (QMBA). 1 female: [Australia, North Queensland]: The Boulders, 5-II-1975, B. K. Cantrell (DPI).

Etymology

The name is in honour of Martin BAEHR, outstanding authority of beetle systematics.

***Dasynus cephalotus* sp. n.**

(Fig. 2)

Diagnosis

Clearly distinguished by the following characters: head subquadrate, declivent (Fig. 2), abdominal spiracles closer to posterior border, femora and tibiae pale yellow and mottled with brown discoidal spots, antennal segment II the longest, III the shortest, and IV longer than or subequal to I, and rostrum short not extending beyond the anterior margin of mesosternum.

In *Dasynus fuscescens* (DISTANT 1911) and *D. baehri* previously described, the head is elongate and not declivent (Figs 1, 3), the abdominal spiracle closer to the anterior margin, antennal segment IV the longest, III the shortest, and II longer than I, the femora and tibiae entirely yellow lacking brown or black spots, and rostrum longer reaches the posterior margin of mesosternum or posterior margin of abdominal sternite III.

Description

Female. Dorsal coloration. Yellowish ochraceous with punctures pale brown to black and following areas black: ocellar tubercle, and external margin of calli; antennal segment I yellowish ochraceous, with pale brown granules; segments II and III yellowish ochraceous, and IV brownish with basal third yellowish ochraceous; apex of scutellum, costal border of corium, and claval and corial veins pale yellow to whitish yellow; hemelytral membrane dark brown; connexival segments II-III pale yellow, and IV to IX pale yellow with inner margin black; dorsal abdominal segments II to VI pale orange yellow, and VII to IX black with posterior border of IX pale yellow.

Ventral coloration. Pale yellow, with rostral segment IV (basal third yellowish), large discoidal spot on propleura and mesopleura, a short elongate spot at upper margin of metapleura, and one or two irregular spots at abdominal sterna III to VI and located below pleural margin black; coxae, trochanter, and tarsi pale yellow; femora and tibiae pale yellow mottled with numerous pale brown discoidal spots; rim of abdominal spiracle brownish.

Structure. Head wider than long across eyes, subquadrate, declivent, and dorsally flat to barely convex; tylus projected beyond antenniferous tubercle and juga, with apex rounded; juga, mandibular plate, and sides of head in front of eyes unarmed; antenniferous tubercle unarmed, never contiguous; space between antenniferous tubercles 1.0 wider than one tubercle; antennae shorter than total body length; antennal segment I slender, thickest, slightly curved outward, and longer than maximum length of head; segments II and III cylindrical and slender, and segment IV fusiform; antennal segment II the longest, III the shortest, and IV longer than or subequal to I; ocelli close to eyes, raised; preocellar pit deep; eyes hemispheric, protruding, and removed from the pronotum; postocular tubercle well developed, and exposed; buccula short, raised, obliquely straight, entire, unarmed, and not projecting beyond antenniferous tubercle; rostrum not extending beyond the anterior margin of mesosternum; rostral segment II the longest, IV the shortest, and I longer than III.

Thorax. Pronotum. Wider than long, trapeziform, slightly declivous; collar present; frontal angles obtuse; humeral angles not exposed, subtruncated; anterior margin smooth; anterolateral margins obliquely straight, emarginated and tiny nodulose; posterolateral margins sinuate with outer third tiny nodulose, and inner third smooth; posterior margin straight, smooth; calli indistinct, not raised, with deep submedial longitudinal furrow; triangular process absent (Fig. 2). Ventrally without longitudinal medial sulcus; metathoracic peritreme raised; anterior lobe auriculiform, and posterior lobe small, subacute. Legs. Unarmed; tibiae terete, and sulcate. Scutellum. Triangular, longer than wide, and apically truncated; disc flat, with lateral margins emarginated. Hemelytra. Macropterous, reaching the apex of the last abdominal segment; costal margin emarginate; apical margin obliquely straight, with apical angle rounded, and extending beyond the middle third of the hemelytral membrane.

Abdomen. Elongate, parallel sided; connexivum raised above tergum, with posterior angles not produced into spines or tubercles; ventrally without longitudinal medial sulcus; abdominal spiracle closer to posterior border. Genitalia. Abdominal sternite VII with fissura, and laterally slightly globose; gonocoxae I enlarged antero-posteriorly, in caudal view closed, in lateral view flat; paratergite VIII triangular with spiracle visible; paratergite IX as broad large-sized squarish expansion.

Integument. Body surface rather dull, and almost glabrous. Dorsal surface of head, pronotal disk, scutellar disk, clavus, and corium densely punctured, with small and large coarse punctures; connexivum smooth; head ventrally and abdominal sterna weakly punctate with small and medium sized punctures; propleura, mesopleura, metapleura and acetabulae densely punctured.

Male. Unknown.

Measurements (in mm). Female only: body length 15.60; head length 1.64; head width across eyes 2.32; interocular space 1.24; interocellar space 0.50; antennal segments: I, 3.20; II, 4.40; III, 2.88; IV, 3.24; pronotum length 2.80; pronotum width across humeral angles 4.12; scutellar length 1.96; scutellar width 1.84.

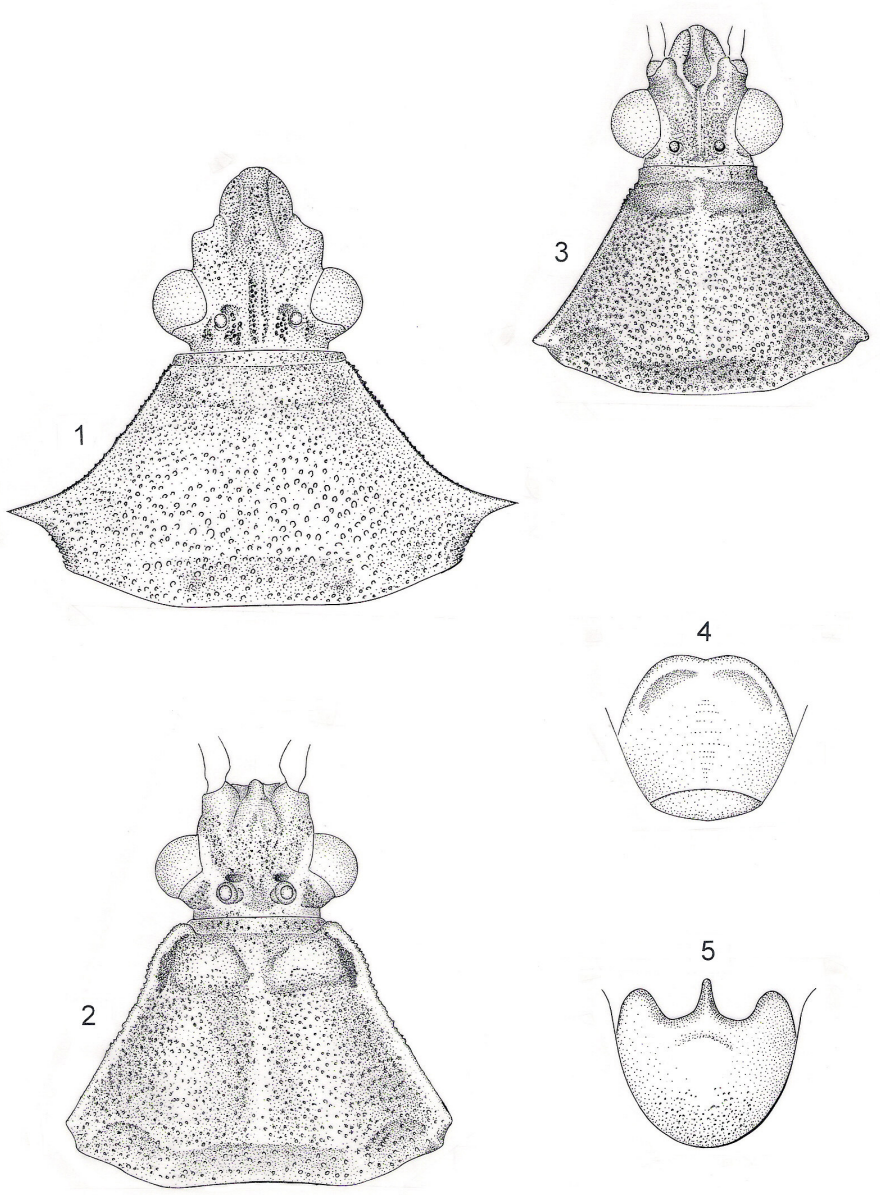
Type material

Holotype female: [Australia, Central Queensland]: Mt. Moffat Nat. Park, Top Shelter Shed, 1000m, 10-12-XII-1987, Monteith, Thompson, Yeates (QMBA).

Paratypes. 2 females: [Australia, Queensland]: Carnarvon George, 26-30-III-1964, G. Monteith (ANIC, QMBA). 1 female: [Australia, Central Queensland]: Mt. Moffat Nat. Park, 15-XII-1987, Monteith, Thompson, Yeates (UNAM).

Etymology

The name refers to the shape of head.



Figs 1-5. *Dasynus spp.* 1-3. Head and pronotum. 1 – *D. baehri sp. n.*; 2 – *D. cephalotus* sp. n.; 3 – *D. fuscescens* (DISTANT). 4-5 Male genital capsule in caudal view. 4 – *D. fuscescens* (DISTANT); 5 – *D. baehri* sp. n.

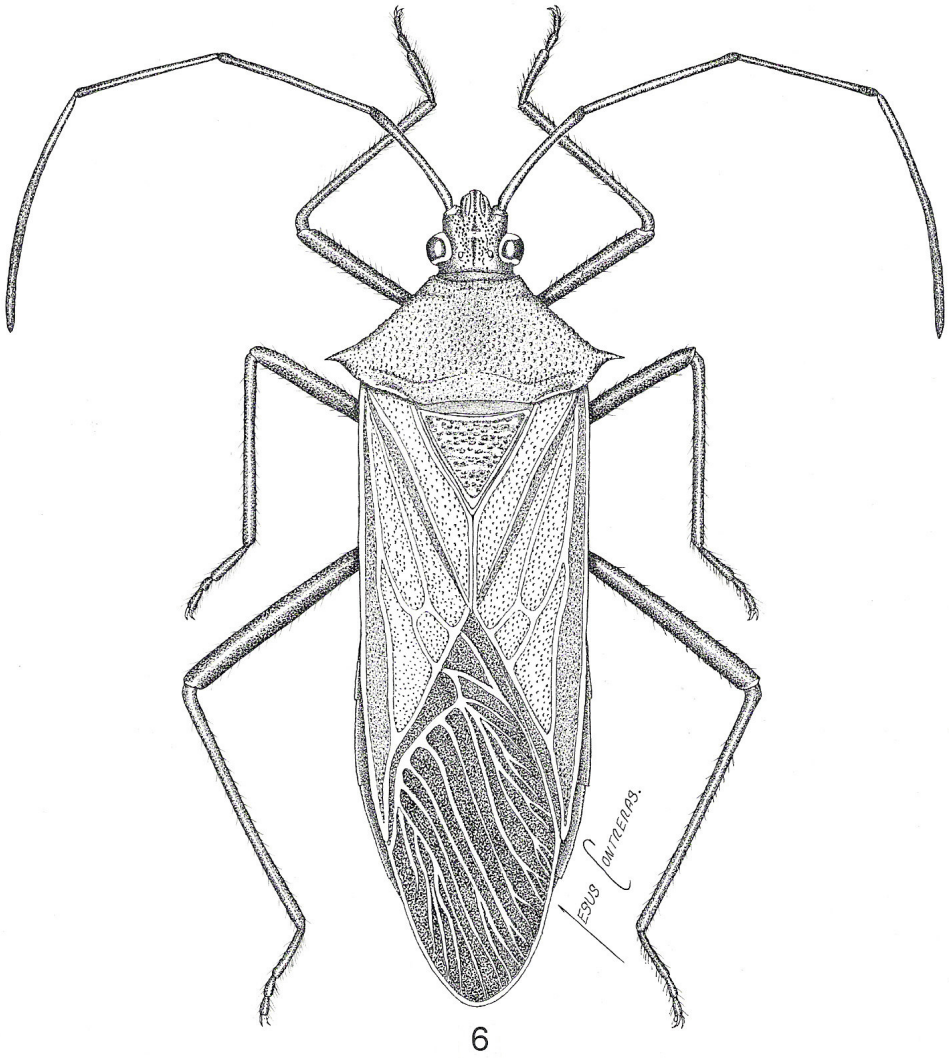


Fig. 6. Dorsal view of *Dasynus baehri* sp. n. (male).

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