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TEINOBASIS KIAUTAI SPEC. NOV., A NEW SPECIES FROM PAPUA NEW GUINEA (ZYGOPTERA: COENAGRIONIDAE)

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The new sp. is described, diagnostic characters of the adult ♂ are illustrated and the affinities of the sp. are discussed. Holotype ♂: Papua New Guinea, Eastern Highlands prov., Herowana, 24-XI-2001; deposited at South Australian Museum, Adelaide. *T. kiautai* sp. n. is most similar to *T. scintillans*, but dramatically differs from it in the shape of the ♂ pronotum.

INTRODUCTION

The odonate fauna of New Guinea is exceptionally diverse and recent surveys in the southern lowlands of Papua New Guinea have revealed a number of new and interesting taxa (RICHARDS et al., 1998). The fauna of higher elevations has remained poorly studied in recent years but OPPEL (2005) documented a remarkable diversity of zygopteran species at a single site in pristine lower-montane rainforests of the Crater Mountain Wildlife Management Area (CMWMA) in Papua New Guinea. At around the same time THEISCHINGER & RICHARDS (2005) described a new species of *Drepanosticta* from Herowana Village at around 1400 m asl in the CMWMA. In this paper we describe and illustrate a new *Teinobasis* species fom Herowana Village. This is the fifth in a series of papers that aims to address taxonomic novelties in New Guinean Odonata collected by SJR between 1996 and 2001 (THEISCHINGER & RICHARDS, 2005, 2006a, 2006b, 2006c).

MATERIAL AND METHODS

The descriptive terminology largely follows CHAO (1953) and WATSON & O'FARRELL (1991). Coloration is given as detectable from the preserved material. Measurements are given in millimetres (mm). All illustrations were done with the aid of a camera lucida and are not to scale.

Type material is deposited in the collection of the South Australian Museum (SAM), North Terrace, Adelaide, South Australia.

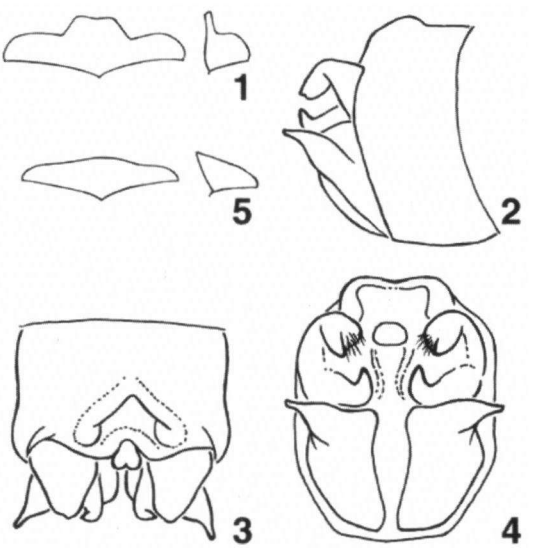
TEINOBASIS KIAUTAI SP. NOV.

Figures 1-4

M a t e r i a l. – **Holotype** ♂ (SAMA I21776): Papua New Guinea, Eastern Highlands prov., Herowana, 10.00 a.m., 24-XI-2001, S.J. Richards (SAM); 1 **paratype** ♂ (SAMA I21777), data as for holotype.

E t y m o l o g y. – The species is dedicated to Prof. Dr Bastiaan K i a u t a in friendship and recognition of his tremendous merits in Odonatology and on the occasion of his 70th birthday.

MALE. – H e a d. – Labium greyish yellow. Base of mandibles, genae, anteclypeus and antefrons blue; labrum and antennae black; postclypeus black with small triangular greyish blue mark each side. Top of the head black except for a hardly noticeable rust-brown spot between each lateral ocellus and antenna. Postgenae largely pale brownish- to bluish grey, narrowly black along eye-margin.



Figs 1-5. Male diagnostic characters of *Teinobasis kiautai* sp. n. (Figs 1-4) and *T. scintillans* Lieftinck (Fig. 5): (1, 5) prothorax, dorsal and lateral views; – (2-4) anal appendages, lateral (2), dorsal (3) and caudal (4) views.

T h o r a x. – Prothorax. – Pronotum brown to black, propleura largely pale greyish blue. Posterior lobe of pronotum almost black widely rounded laterally and with very distinct trapezoidal median lobe. Coxa and trochanter pale greyish blue; femur pale greyish blue with most of outer and posterior face black; tibiae greyish brown to brownish black; tarsal segments and claws largely brown and with apex black.

Synthorax. – Mesepisternum and mesepimeron metallic black but may also appear with irregular median

streak, respectively almost entirely, metallic brown. A small, definitely black, dorsal patch on mesepimeron continues over approximately dorsalmost 1/6 of metepisternum. Remainder of metepisternum and all of metepimeron and poststernum pale blue. Legs much as in prothorax.

Wings. – Membrane hyaline, slightly tinged with yellowish. Venation black. Pterostigma of both wings overlying very close to one cell, brown to black, at least 1.5 times as long as wide, its sides slightly oblique and parallel to each other. Ac situated much closer to Ax2 than to Ax1. IR3 and R4 well separated at their origin; R4 arising distinctly before the subnodus and curved at origin, IR3 arising at subnodus. Postnodals 13/12-13.

A b d o m e n. – Very slim and slender, largely black. Sides of terga 1 and 2 largely blue; terga 3-7 with small basal spot each side and much of ventral edge pale greyish blue; terga 8 and 9 laterally blue, segment 10 laterally and ventrally blue; sterna greyish black. Upper branch of superior anal appendages bent ventrally with apical section long and apex somewhat bilobed, markedly longer than the lower branch. Inferior appendages distinctly outwardly directed and distally strongly attenuated.

M e a s u r e m e n t s (in mm). – Hindwing 21.7-22.3, abdomen (including appendages) 36.2--38.1.

FEMALE unknown.

HABITAT. – Herowana is a large village located at an altitude of 1400 m in Eastern Highlands Province, Papua New Guinea. The immediate vicinity of the type locality has been extensively modified for an airstrip and houses and gardens. Rainforest habitats occur within approximately 100 m of the village but coffee gardens are expanding rapidly in the area. The type locality is in the Crater Mountain Wildlife Management Area and the damselflies were found near small, clear streams flowing through moderately disturbed rainforest.

DISCUSSION. – *T. kiautai* sp. n. is very similar to *T. scintillans* Lieftinck to which it also keys out in the key given by J. Michalski (manuscript) and is therefore considered closely allied with that species. There are, however, significant differences. The posterior lobe of the male pronotum of the new species is produced medially into a distinct trapezoidal secondary lobe that is not developed in *T. scintillans* (cf. Figs 1, 5). The ventrally pointing apex of the superior anal appendages is markedly longer, the lower branch markedly shorter and the inferior appendages are distally markedly more attenuated and more outwardly directed in the new species than is the case in *T. scintillans*.

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