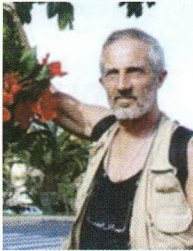


# Four new species of the genus *Tmesisternus* Latreille, 1829 (Coleoptera: Cerambycidae, Tmesisternini) from New Guinea, the Solomon Islands and Sulawesi

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**Abstract:** Four species, new to science, of the genus *Tmesisternus* Latreille, 1829 are described: *Tmesisternus quateae* originates from Papua, Indonesia. *Tmesisternus shanahani* is from the Solomon Islands, *Tmesisternus eliptaminus* from Papua New Guinea (PNG) and *Tmesisternus duffelsi* is from Sulawesi.

**Rangkuman:** Empat spesies baru untuk ilmu dari genus *Tmesisternus* Latreille, 1829 dipertelakan: *Tmesisternus quateae* berasal dari Papua, Indonesia. *Tmesisternus shanahani* dari Kepulauan Solomon, *Tmesisternus eliptaminus* dari Papua New Guinea (PNG) dan *Tmesisternus duffelsi* dari Sulawesi.

**Keywords:** : Lamiinae, Papua, PNG, longicorn beetle.

## Introduction

The genus *Tmesisternus* Latreille, 1829 is a very species rich genus and there are frequently new species to describe. After publication of *Tmesisternus wasiorenensis* Withaar, 2013, the author identified two new species in the RMNH, the first collected by S. Quate in the Vogelkop (Birdshead Peninsula) of West Papua, the second collected on Sulawesi by M.J. and J.P. Duffels. The other two new species were located in the BPBM, one collected by Brandt in PNG and the second by P. Shanahan on the Solomon Islands.

## Abbreviations

The abbreviations given below have been used in the text:

BPBM - Bernice P. Bishop Museum, Honolulu, U.S.A.

RMNH - Naturalis Biodiversity Center, Leiden, The Netherlands.

PNG - Papua New Guinea.

## Four new species

### *Tmesisternus quateae* spec. nov.

(figs 1, 6)

**Material:** Holotype: ♂, Indonesia: Papua; Birdshead, W. of Manokwari, 550m. 4-31.i.1962, leg. Quate. RMNH.

### Description

**Head:** Black, on the front a longitudinal ridge with an elliptical central depression, from vertex to labrum and lateral ridges. With scattered yellow pubescens on cheeks and vertex. On each side of the central ridge three dots with thick yellow pubescens, one on frons, one along the upper eyebrow and one before labrum. The black interruptions between the dots have, including the middle and lateral ridges, a W-pattern. Only the vertex is punctured and with very delicate pubescens.

**Antenna:** Not complete, but the first nine parts reaching beyond the elytral apex. Black with very delicate grey pubescens. The scape swollen. The fourth joint a little longer than the third. Covered with some short spread stiff hairs.

**Pronotum:** Shiny black, completely with deep punctures except a smooth small longitudinal central area, somewhat broader at base. The lateral ridges are bent from base to the narrowed centre and caudally expanded with a large blunt rounding. Ventrally from the lateral ridge is a sharp tubercle, visible from above. The complete pronotum scarcely covered with short yellow pubescens.

**Scutellum:** Shiny black with scattered yellow pubescens.

**Elytra:** Shiny black at one third of the elytra from base, shoulders and some interstices smooth. Base with heavy punctures. The other part of the elytra completely covered with mixed brown and yellow pubescens, irregularly fading in the predominantly black front area. On the distal half of the elytra, partly two black costae ending before the truncated apex.

**Legs:** Black with very delicate grey pubescens. Femur swollen, tarsi red.

**Ventrally:** Abdomen covered with black mottled grey pubescens except for longitudinal central area.

**Length:** 17 mm. **Width:** 5.5 mm.

**Female:** unknown.

**Diagnosis:** Yellow dots on front of the head indicate that this species is related to the jaspideus group however the species in that group do not have an elliptical depression on front. Judged by the black shining pronotum it resembles *T. timorlautensis* Breuning, 1939 in the timorlautensis group but the genitalia are completely different.

**Etymology:** This species is named in honour of the collector Mrs. S. Quate.

***Tmesisternus shanahani spec. nov.***

(figs 2, 7)

**Material:** Holotype: ♂, Solomon Isl.: Vella lavella, U10 crater, 10m. 16.xii.1963, leg. Mr. P. Shanahan. BPBM.

**Description**

**Head:** Pitchy brown, dorsal side covered with golden pubescens except a longitudinal stripe in the middle, lateral ridges and two areas behind the upper eye lobes. The stripe with a fine groove. Between upper eye lobes and that stripe on each side some punctures.

**Antenna:** Shiny red, not complete but probably reaching to the elytral apex. Completely covered with fine grey pubescens and ventrally fringed with stiff hairs. The scape swollen to the apex.

**Pronotum:** Shiny pitchy brown, wider than long and at base wider than apex. Dorsal side with four longitudinal areas with golden pubescens and diffusely punctured, from base to front and connected.

The lateral ridges are fine granulated and from rounded base corner nearly parallel sided to front but at apex bent inwards to the front. The ventral side with sparse yellow pubescens and a hardly visible tubercle under the lateral ridges.

**Scutellum:** Pitchy brown with laterally golden pubescens.

**Elytra:** Shiny pitchy brown, parallel sided and at the end narrowed to the truncated apex. Hardly punctured. On base four short longitudinal golden pubescent stripes on each elytron from sutur to shoulder. A short one forming one stripe with the side of the scutellum, a second short one, and with a longer third one, wider and reaching to the middle of the elytron, the fourth one on the shoulder is as short as 1 and 2. For the rest, the elytra, including epipleura completely covered with irregular longitudinal pattern of golden pubescens.

**Legs:** Femur shiny chestnut brown and swollen at apex with sparse grey pubescens. Tibia and tarsi red with fine grey pubescens.

**Ventrally:** Abdomen shiny chestnut brown with golden pubescent dots laterally

**Length:** 15 mm. **Width:** 4,5 mm.

**Female:** unknown.

**Diagnosis:** Judged from the locality, its golden habitus and the pattern of the pronotum, this species belongs to the salomonus group Gressitt 1984.

**Etymology:** This species is named in honour of the collector of the type specimen, Mr. F. Shanahan.

***Tmesisternus eliptaminus spec. nov.***

(figs 3, 4, 8)

**Material:** Holotype: ♂, PNG, Eliptamin vall., 1-15.v.1959, 1200-1350m. Leg. Brandt. BPBM.

**Description**

**Head:** Chestnut brown, yellow pubescens on cheeks and on front around the eye lobes. Otherwise with red brown pubescens except an area behind the upper eye lobes, a central deep longitudinal groove in the middle, elevated at both ends, tapering to the front, and lateral ridges from antennal insertions to the front but not reaching labrum. On vertex some fine punctures.

**Antenna:** Only three segments available, red brown with very fine pubescens.

**Pronotum:** Chestnut brown, from base tapering to the front. Weak lateral ridges with a blunt tubercle at one fourth from front and a sharp tubercle on a lower store, laying in the dark brown pubescent area on the sides of the pronotum. The dorsal side with scattered deep punctures and covered with red brown pubescens, except a longitudinal sharp elevated ridge with a fine shiny and smooth centre.

**Scutellum:** Chestnut brown, nearly a circle, completely covered with red brown pubescens.

**Elytra:** Red brown, completely covered with red brown pubescens, tapering to the apex and at the end narrowed to the apically spined elytra apex.

A raised sutural costa and four other costae. The second and fourth strongly elevated, the first and third less strong elevated and not complete. The second costa starts in the center of the base and is bent to the sutur and than parallel with the first costa and not reaching the apex. The first costa starts from the scutellum and is reaching about the center of the elytra. The third costa starts about a quarter from base and ends at about one quarter from apex. The fourth costa starts next to the start of the second one, is a little shorter than the second and is not reunited with this one. The epipleura are dark brown pubescent with three yellow pubescent dots on the last half of it. (fig. 3) The elytra are between the costae deep punctured on the first half and dissolved to the apex.

**Legs:** Red brown, completely covered with adjacent grey pubescens.

**Ventrally:** Chestnut brown and laterally with yellow pubescent dots.

**Length:** 16mm. **Width:** 5 mm

**Female:** unknown.

**Diagnosis:** This species is related to *T. geelvinkianus* Gestro, 1876 in the marmoratus group but the four red coloured bands on the pronotum are lacking.

**Etymology:** This species is named after the valley where it is found.

### ***Tmesisternus duffelsi* spec. nov.**

(figs 5, 9)

**Material:** Holotype: ♂, Indonesia; Sulawesi, Lore Lindu. N.P. 10 km. S.E. of Poloka, 1900 m. 26.iii.1985 leg. M.J. and J.P. Duffels. Stat. 57. Disturbed lower montane forest. RMNH.

### **Description**

**Head:** Castaneus brown. Dorsally red, wrinkled, finely punctated and a very fine black central groove. Cheeks projecting.

**Antenna:** Not complete. Scape black and widened apically. The other segments dark brown. The fourth segment a little longer than the third.

**Pronotum:** Red and completely bordered with a small black area. Lateral ridges distally rounded, slightly S-curved and nearly straight ending to the front corner. Central area smooth, laterally punctured, followed by transverse wrinkles. The sides dark brown with sharp tubercles, visible from above.

**Scutellum:** Black, basally straight and rounded at apex. Nearly completely covered with white pubescens.

**Elytra:** Pitchy brown, a little longer than twice the head and pronotum together. Parallel sided and at the end bent to the rounded apex with a very small sutural spine. The base with deep punctures and covered with short white, bristles, except the projecting shoulders. The rest of the first part of the elytra including the shoulders shiny, smooth and more or less granulate, gradually changing into fine punctures. The distal half of the elytra is dull, on each elytron three smooth ridges, one along the suture and two originating in the shiny basal area and merging before apex. On the elytra some areas with white pubescens with deep punctures: a small one pre-medially, and three post-medially ones along the smooth ridges to apex

**Legs:** Femur black and elongate, especially the hind one. The tibia and tarsi completely covered with short, white bristles.

**Ventrally:** Pitchy brown, smooth in the middle and laterally with long golden hair.

**Length:** 28 mm. **Width** 8 mm.

**Female:** Unknown.

**Diagnosis:** Judged from the pronotum this species resembles *T. ochraceosignatus* (transfered from *Tmesisternopsis* by Weigel & Withaar 2006) but *duffelsi* is much longer and the pattern complete different. The femora are much longer in this species . It is allied to *ochraceosignatus* .

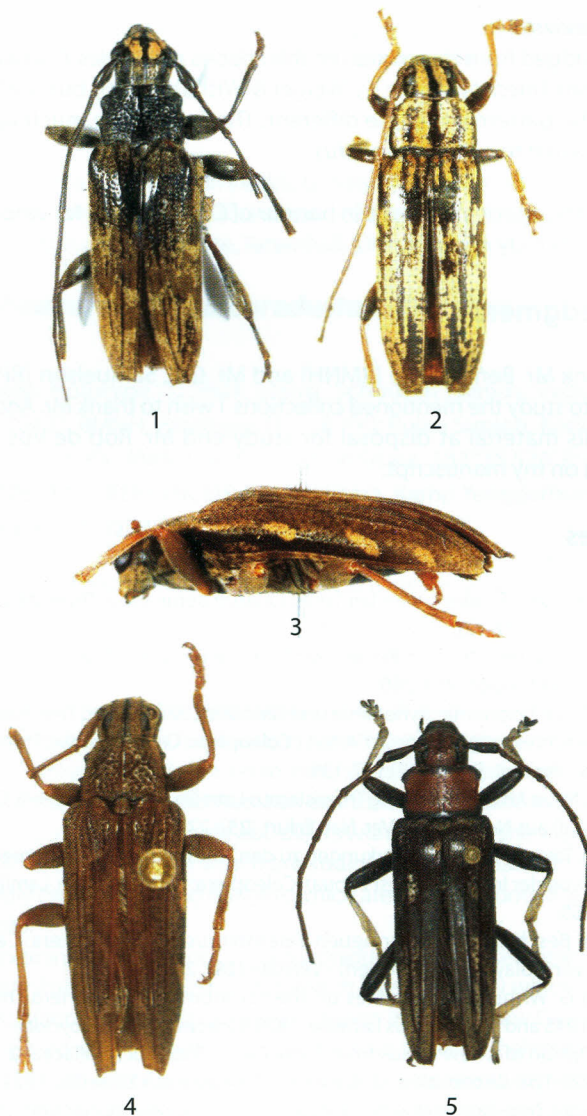
**Etymology:** This species is named in honour of Dr. J.P. Duffels for whose help with my studies, I am truly grateful.

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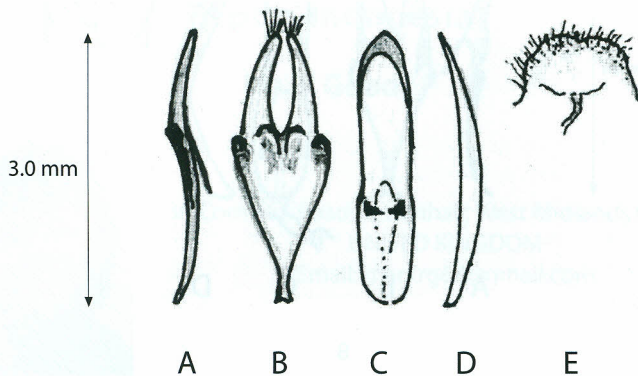
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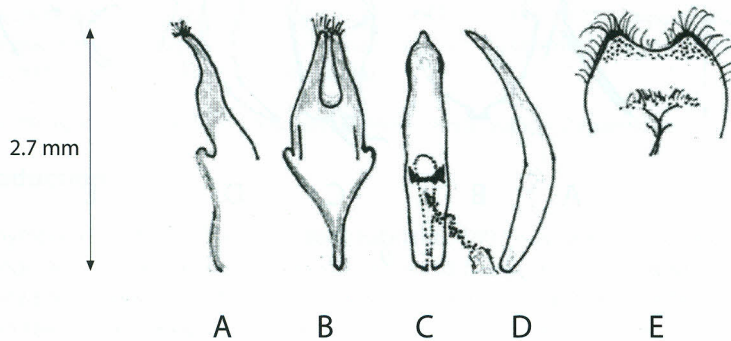
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**Fig. 1.** *Tmesisternus quateae* **spec. nov.** dorsal.  
**Fig. 2.** *Tmesisternus shananani* **spec. nov.** dorsal.  
**Figs 3-4.** *Tmesisternus eliptalinus* **spec. nov.**: 3. lateral, 4. dorsal.  
**Fig. 5** *Tmesisternus duffelsi* **spec. nov.** dorsal.



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**Figs 6-7.** Male genitalia: 6. *Tmesisternus quateae eliptalinus spec. nov.*; 7. *Tmesisternus shanahani spec. nov.*