New tachyine species from the Oriental Region
(Coleoptera: Carabidae: Bembidiini: Tachyina)

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New tachyine species from the Oriental Region
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Abstract

Eight new species of the bembidini subtribe Tachyina are described from various countries in the Oriental Region: genus *Elaphropus* Motschulsky, 1839, subgenus *Tachyura* Motschulsky, 1862: *E. serrulipennis* n. sp. and *E. schawalleri* n. sp. from the island of Leyte/Philippines, *E. rufinus* n. sp. from Brunei/Borneo, *E. grimmii* n. sp. from Sabah/Borneo, and *E. martensi* n. sp. from Nepal; genus *Tachyta* Kirby, 1837: *T. quadrinotata* n. sp. from Nepal and *T. laticollis* n. sp. from Sabah/Borneo; genus *Paratachys* Casey, 1918: *P. leytensis* n. sp. from the island of Leyte/Philippines. For *T. laticollis* n. sp. a new subgenus *Eurytachyta* within the genus *Tachyta* is described. Male and female genitalia are figured if available. The new species are compared with their most similar relatives.

Key words: Coleoptera, Carabidae, Bembidiini, Tachyina, new species, Oriental Region.

Zusammenfassung

Acht neue Arten der Subtribus Tachyina der Tribus Bembidiini aus verschiedenen Ländern der Orientalischen Region werden beschrieben:Gattung *Elaphropus* Motschulsky, 1839, Untergattung *Tachyura* Motschulsky, 1862: *E. serrulipennis* n. sp. und *E. schawalleri* n. sp. von der Philippineninsel Leyte, *E. rufinus* n. sp. aus Brunei/Borneo, *E. grimmii* n. sp. aus Sabah/Borneo und *E. martensi* n. sp. aus Nepal; Gattung *Tachyta* Kirby, 1837: *T. quadrinotata* n. sp. aus Nepal und *T. laticollis* n. sp. aus Sabah/Borneo; Gattung *Paratachys* Casey, 1918: *P. leytensis* n. sp. aus Leyte. Für *Tachyta laticollis* n. sp. wird eine neue Untergattung *Eurytachyta* innerhalb der Gattung *Tachyta* beschrieben. Die männlichen und weiblichen Sexualorgane werden abgebildet, sofern bekannt. Die neuen Arten werden mit ähnlichen bzw. verwandten Arten verglichen.

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1 Introduction

Through courtesy of several collectors and museum curators a number of tachyine species from the Oriental Region have been received recently for identification that include some undescribed species alongside with several more or less well known species. The new species belong to the genera *Elaphropus* Motschulsky, 1839, subgenus *Tachyura* Motschulsky, 1862, *Tachyta* Kirby, 1837, and *Paratachys* Casey, 1918, and are described herein.

The supraspecific taxonomy of the subtribe (or tribe) Tachyina (-ini) is still being discussed and several opinions exist about the status of most supraspecific groups. In this paper I mainly follow the system of LORENZ (2005) who, apart from a number of well defined genera, for the bulk of species acknowledged two genera, namely *Tachys* Dejean, 1821 and *Elaphropus* Motschulsky, 1839. *Tachyura* Motschulsky, 1862 belongs as subgenus to *Elaphropus*. The subgenus *Tachyura* as denoted by LORENZ (2005) (including the Nearctic species of the former genus *Barytachys* Chaudoi, 1868) covers more than 250 species that are distributed in the Palaeartic, Afrotropical, Oriental, Papuan/Australian, and Nearctic Regions. The subgenus, or at least the eastern species, excluding the Nearctic *Barytachys*, is equivalent to the *politus*-group and some related species-groups of ANDREWS (1925) and DARLINGTON (1962). It should be mentioned, however, that the generic and subgeneric systematics of Tachyini are by no means settled. SCIAKY & TAGLIANTI (2003) and KOPECZY (2003), for example, proposed different systems with more restricted limits of the subgenus *Tachyura*. Also the status of the genus or subgenus *Nototachys* Alluaud, 1930 is controversially discussed.

The species of *Tachyura* in the sense of LORENZ (2005) are characterized by absence of deep pits on the mentum, parallel frontal sulci which do not completely cross over
onto the clypeus, presence of the 8th elytral stria which usually is deeply impressed and almost complete, the apical recurrent stirole being situated more or less in the middle of the elytra, dentate humerus, and the pronotum with an impressed basal sulcus.

This subgenus includes very differently shaped, structured, and coloured species. The Oriental region is particularly rich in species and certainly the Oriental Tachyura fauna would merit a modern comprehensive revision, in spite of the large paper of ANDREWES (1925) which still must be used for identification of species. However, this is presently outside of the capacity of the author. Also probably many additional species are supposed to exist in the Oriental Region which has not been sufficiently and systematically collected for tachyine beetles. The New Guinean species of Tachyura were revised by DARLINGTON (1962), but this revision likewise is rather preliminary. The Australian species were revised by BAEHR (1988). A number of additional species, mainly from the southern Oriental Region and from New Guinea, were recently described by BAEHR (2014a).

KOPECKÝ (2003) and LORENZ (2005) included Paratachys Casey, 1918 as a subgenus in the genus Tachys Dejean, 1821 (s. l.). In this decision I do not follow them in the present paper, but, like most other modern authors, treat Paratachys as a separate genus. It is a very large genus which includes a multitude of species throughout the world, and it is congruent with the triangularis-group of ANDREWES (1925).

Species of Paratachys are characterized by the presence of two deep pits in the mentum and a distinct recurrent stria on the elytra that runs in the middle of the apex and embraces the posterior discal puncture just at its incurved apex.

The genus Tachyta Kirby, 1837 includes a number of more or less depressed species which are distributed in the Holarctic, Afrotropical, Oriental, and Australian Regions. It is characterized by finely serrulate tarsal claws, elongate terminal palpomeres, and a straight, elongate recurrent stria that runs close to the elytral margin. The genus includes three subgenera, two of which occur in the Oriental Region.

Eight new species from the genera Elaphropus, Tachyta, and Paratachys are herein described from Nepal, Borneo, and the Philippines. In the genus Tachyta a new subgenus Eurytachyta is described for an unusual new species.

Acknowledgements
I am indebted to ROLAND GRIMM (Neuenbürg), WOLFGANG SCHAWALLER (Stuttgart), and DAVID WRASE (Berlin) for the kind loan or gift of specimens. I also thank CHARLES HUBER (Bern) and JOACHIM SCHMIDT (Admannshagen) for some corrections.

2 Material and methods

For the taxonomic treatment standard methods were used. The genitalia were removed from specimens relaxed for a night in a jar under moist atmosphere, then cleaned for a short while in hot 4 % KOH.

The habitus photographs were obtained with a digital camera using ProgRes Capture Basic and AutoMontage and subsequently were worked with Corel Photo Paint X14.

Measurements were taken using a stereo microscope with an ocular micrometer. Body length has been measured from apex of labrum to apex of elytra. Length of pronotum was measured along midline, width of base of pronotum at the extreme tips of the basal angles.

The types are stored in the working collection M. BAEHR in Zoologische Staatssammlung, München (CBM), in Staatliches Museum für Naturkunde, Stuttgart (SMNS), and in the collection D. WRASE, Berlin (CWB).

3 Genus Elaphropus, subgenus Tachyura Motschulsky, 1862


Type species: Elaphrus quadririgitus Duftschmid, 1812, by subsequent designation by MOTSCHULSKY (1862).

Diagnosis

The subgenus is characterized by absence of deep mental pits, well developed posterior transverse sulcus of the pronotum, almost complete 8th elytral stria, rounded humerus, well developed recurrent stria on the elytra that is situated more or less in the middle, and presence of two discal elytral punctures and setae.

Description of Elaphropus serrulipennis n. sp.
(Figs. 1, 6, 12)


Etymology

The species name refers to the strongly serrate lateral margins of the elytra.

Diagnosis

Characterized by pale reddish-brown colour, depressed eye, cordiform pronotum with rectangular basal angle, markedly serrate margin of the elytra, presence of the complete set of elytral striae, uninterrupted 8th elytral stria, straight, and oblique recurrent stria that is rather closely situated to the lateral margin.

In some character states this species reminds E. singularis (ANDREWES, 1925) of the exaratus-group of ANDREWES (1925) or the singularis-group in the sense of DARLINGTON (1962), but is distinguished by the completely striate elytra...
which are serrulate and setulose almost along their whole length, and by the uninterrupted 8th stria. Because it does not match the most important determining character states of both groups, I prefer to include it into the subgenus Tachyura without attributing to a definitive subgroup.

Description

Measurements and ratios. Body length: 2.10–2.25 mm; width: 0.85–0.90 mm. Ratios: Width/length of pronotum: 1.42–1.47; widest diameter/width of base of pronotum: 1.23–1.28; width of pronotum/width of head: 1.31–1.35; length/width of elytra: 1.51–1.57.

Colour (Fig. 12). Upper and lower surfaces unicolourous pale reddish-brown. Antenna, palpi, and legs yellow.

Head (Fig. 12). Of normal size but eye depressed and little produced laterad, orbit small and indistinct. Labrum anteriorly straight. Clypeus straight, clypeal suture shallow. Frons slightly convex, without any impression. Frontal furrows wide and shallow, slightly curved, anteriorly not crossing onto clypeus, posteriorly attaining middle of eye. Mandible rather elongate, palp thick, pubescent, apical palpomere short and very thin. Mentum without pores. Antenna fairly elongate, 7th–10th antennomeres twice as long as wide. Dorsal surface impunctate, with distinct though superficial, about isodiametric micromericulation that consists of rather large meshes, surface glossy.

Pronotum (Fig. 12). Moderately wide, cordiform, at base about as wide as at apex; dorsal surface gently convex. Apex with deep excision, apical angles markedly projected and rather acute. Lateral border evenly convex but in basal quarter straight or very slightly concave. Base laterally slightly excised, in middle produced, basal angles rectangular, acute. Lateral sulcus very narrow, not widened at base. Both, apex and base not margined. Median line fine, slightly impressed, not attaining the apex, near base deepened to a wide sulcus. Anterior transverse impression barely perceptible, posterior impression deep, finely crenulate, in the median sulcus with a pore. Basal grooves absent, base near lateral margin without a carina. Anterior lateral seta inserted at anterior third, in front of widest diameter, posterior lateral seta inserted near basal angle. Surface impunctate, with extremely superficial, about isodiametric micromericulation, very glossy.

Elytra (Fig. 12). Moderately elongate, lateral margin slightly convex, elytra wide at humerus; dorsal surface moderately convex but depressed on disk. Humerus rounded, not produced, basal margin incomplete, attaining c. level of 4th stria. The complete lateral margin serrulate, more coarsely so in basal third, but not setulose. All striae distinct, deeply impressed, at bottom very finely crenulate. Striae almost attaining base, except the sutural one ending in front of apex, the outer ones more shortened than the inner ones, apex widely glabrous. All intervals on disk markedly raised, even slightly tectiform. 8th stria complete, uninterrupted, deeply impressed, impunctate. Recurrent stria deep, moderately elongate, oblique, straight, at end not incurved, situated rather close to margin. 3rd interval bipunctate, the anterior puncture located at basal third, the posterior puncture located about at apical third, both adjacent to 4th stria. Intervals impunctate, with distinct, though superficial, about isodiametric micromericulation, surface glossy.

Lower surface. Not pilose, glabrous. Metepisternum slightly >1.5 times as long as wide at apex. Terminal abdominal sternum in male bisetose, in female quadrisetose.

Legs. Two basal tarsomeres of the male protarsus slightly widened, squamose underneath, and mediad triangularly dentate.

Male genitalia (Fig. 1). Aedeagus short and compact, stout in apical part, lower surface evenly concave. Apex short and stout, rounded; internal sac with several slightly twisted folds, one of which is rather heavily sclerotized. Parameres very dissimilar, the left one very large, triangular and slightly curved down, the right one smaller but comparatively wide, both with two elongate and one shorter apical setae.

Female gonocoxites (Fig. 6). Gonocoxite 1 comparatively large, without any setae. Gonocoxite 2 short and wide, slightly triangular, straight, only near apex slightly incurved, with wide, obtuse apex. Two short but stout ventro-lateral ensiform setae situated in apical half, one short and stout dorso-median ensiform seta situated close to apex; one short subapical nematiform seta near apex originating from a circular pit.

Variation. Very little variation noted.

Distribution

Island of Leyte, Philippines. Known only from type locality.

Collecting circumstances

According to information of the collector, sampled at light.

Relationships

Uncertain. The species combines character states of different species groups, respectively subgenera, therefore its status remains uncertain as long as a comprehensive phylogenetic survey of the whole tachyine lineage is lacking.

Description of Elaphropus schawalleri n. sp.

(Figs. 2, 7, 13)

Etyymology

The species name is a patronym in honour of the collector WOLFGANG SCHAWALLER of Staatliches Museum für Naturkunde, Stuttgart.

Diagnosis

Characterized by presence of three elytral striae, unimaculate elytra, cordiform pronotum, and dark antenna. Very similar to *E. borneensis* (Andrewes, 1925), but distinguished by lesser number of elytral striae, narrower base of the pronotum, shorter elytra, and darker antenna, palpi, and legs.

Description

Measurements and ratios. Body length: 2.50–2.75 mm; width: 1.1–1.2 mm. Ratios: Width/length of pronotum: 1.35–1.42; widest diameter/width of base of pronotum: 1.26–1.28; width of pronotum/width of head: 1.30–1.33; length/width of elytra: 1.41–1.46.

Colour (Fig. 13). Black, elytra near apex with an ill delimited, rather inconspicuous, yellow or pale red spot that extends between 3rd or 4th and 7th intervals. Antenna dark with 1st and basal part of 2nd antennomere pale, basal and apical palpomeres of maxillary palpus dirty yellow, penultimate palpomere dark; legs dirty yellow to pale brown.

Head (Fig. 13). Of average size. Eye large, laterad rather produced, orbit short, oblique-convex. Labrum anteriorly straight. Clypeus straight, clypeal suture inconspicuous or even not perceptible. Frons slightly convex, without any impression. Frontal furrows slightly duplicated, deep, short, straight, anteriorly slightly crossing to the clypeus, posteriorly not turned laterad. Sulcus medi- ally of the eye deep. Mandible, palpi and the lower surface of the head as in similar species of the subgenus. Antenna moderately short, 7th–10th antennomeres slightly less than twice as long as wide. Dorsal surface impunctate, with distinct though slightly superficial, about isodiametric microreticulation, fairly glossy.

Pronotum (Fig. 13). Moderately wide, at base barely wider than at apex; dorsal surface gently convex. Apex almost straight, apical angles not projected and widely rounded. Lateral border convex over most of its length, near base shortly concave. Base laterally straight to faintly oblique, in middle slightly produced, basal angles rectangular, acute. Lateral sulcus moderately narrow, not widened basad. Apex laterally finely margined, base not margined except near basal angles. Median line fine, slightly deepened basad, neither attaining apex nor base. Anterior transverse impression barely perceptible, posterior impression deep, distinctly crenulate, in middle with a small, barely perceptible puncture. Basal grooves moderately deep, base near lateral margin with a short, slightly oblique, sharp carina. Anterior lateral seta inserted slightly in front of middle, about at widest diameter, posterior lateral seta inserted at basal angle. Surface impunctate, with indistinct, very superficial, isodiametric to slightly transverse microreticulation that in some areas is almost invisible; surface glossy, except for the rather rugose base.

Elytra (Fig. 13). Moderately elongate, not oviform, lateral margin in middle almost straight, wide at humerus; dorsal surface moderately convex but depressed on disk. Humerus rounded, basal margin incomplete, attaining c. level of 4th stria. Three deeply impressed, not crenulate striae present. 1st stria attaining scutellary puncture and apex, 2nd and 3rd striae at base shortened, and gradually ending far in front of apex, apex widely glabrous. In some specimens in middle faint traces of a 4th and even a 5th stria perceptible. Intervals on disk slightly raised. 8th stria complete, deeply impressed, impunctate. Recurrent stria deep, elongate, straight, at end not incurved. 3rd interval bipunc- tate, the anterior puncture located about at basal third, the posterior puncture located slightly in front of the apical third, both adjacent to 3rd stria. Surface impunctate, at least laterally with traces of very superficial, about isodiametric microreticulation, surface glossy.

Lower surface. Not pilose, glabrous. Metepisternum c. 1.75 times as long as wide at apex. Terminal abdominal sternum in male bisetose, in female quadrisetose.

Legs. Two basal tarsomeres of the male protarsus slightly widened, squamose underneath, and mediad triangularly dentate.

Male genitalia (Fig. 2). Aedeagus rather elongate, stout in middle, triangularly narrowed towards apex, lower surface evenly concave. Apex rather elongate, obtusely rounded; internal sac with several slightly twisted folds, one of which, situated at bottom, is heavily sclerotized. Parameres very dissimilar, the left one very large, triangular, with two elongate apical setae, the right one smaller but comparatively wide, with a single elongate apical seta.

Female gonocoxites (Fig. 7). Gonocoxite 1 comparatively large and elongate, triangular, without any setae. Gonocoxite 2 elongate, triangular, curved, with rather acute apex. Two very small ventro-lateral ensiform setae situated about in middle, moderately separated, the dorso- median ensiform seta absent; one short subapical nematiform seta present near apex and originating from a circular pit.

Variation. Very little variation noted.

Distribution

Island of Leyte, Philippines. Known only from type locality.

Collecting circumstances

Sampled at “river bank”, but unknown whether by hand collecting or whether at light.


Relationships

In body shape, structure of elytra, and aedeagus very similar, and probably closely related to *E. borneensis* (Andrewes, 1925).

Description of *Elaphropus rufinus* n. sp.

(Figs. 3, 14)


**Paratype (♀♀):** same data (CBM).

Etymology

The name refers to the dark rufous colour of this species.

Diagnosis

Characterized by rufous colour, cordiform pronotum with trifoveate basis, presence of four short, coarsely crenulate elytral striae, inconspicuously quadrimaculate elytra, and absolutely glabrous surface. Distinguished from similarly short and compact species [e.g. *E. latus* (Peyron, 1858) or *E. aeneus* (Putzeys, 1875)] by colour and number, size, and structure of the elytral striae.

Description

Measurements and ratios. Body length: 2.55–2.70 mm; width: 1.25–1.30 mm. Ratios: Width/length of pronotum: 1.27–1.30; widest diameter/width of base of pronotum: 1.27–1.28; width of pronotum/width of head: 1.26–1.27; length/width of elytra: 1.35–1.37.

Colour (Fig. 14). Upper and lower surfaces dark red, elytra with four moderately distinct pale red spots. The humeral spot more ill delimited and extended from 4th or 5th interval to margin, the apical spot more distinct, extended from 3rd to 7th intervals, and well removed from apex that is slightly paler than the disk. Humerus faintly angular, less than rectangular, acute. Lateral sulcus medially of the eye deep. Frons slightly excised. Clypeus straight, clypeal suture rather smaller but comparatively wide, both with three elongate antenomeres and basal half of 4th yellow, rest infuscate. Palpi and legs yellow.

Head (Fig. 14). Of average size. Eye very large, lateral well produced, orbit very small. Labrum anteriorly slightly excised. Clypeus straight, clypeal suture rather deep. Frons slightly convex, without any impression. Frontal furrows duplicated, deep, almost straight, anteriorly slightly crossing to the clypeus, posteriorly slightly turned lateral. Sulcus medially of the eye deep. Mandible, palpi and the lower surface of the head as in similar species of the subgenus. Antenna moderately elongate, 7th–10th antenomeres c. 1.75 times as long as wide. Dorsal surface impunctate and without microreticulation, very glossy, only labrum with superficial, isodiametric microreticulation.

Pronotum (Fig. 14). Rather wide, at base slightly wider than at apex; dorsal surface rather convex. Apex straight, apical angles not projected, very widely rounded. Lateral border convex, in basal third rather deeply concave. Base laterally straight, in middle produced, basal angles slightly less than rectangular, acute. Lateral sulcus narrow, not widened basad. Apex laterally finely margined, base not margined except near basal angles. Median line very fine, inconspicuous, neither attaining apex nor base. Anterior transverse impression not perceptible, posterior impression deep, very finely crenulate, in middle with three large and deep pores. Basal grooves very deep, base near lateral margin with a short, slightly oblique, sharp carina. Anterior lateral seta inserted slightly in front of middle, at widest diameter, posterior lateral seta inserted at basal angle. Surface very glossy, impunctate and without microreticulation.

Elytra (Fig. 14). Wide and short, not oviform, lateral margin in middle straight, wide at humerus; dorsal surface convex but depressed on disk. Humerus faintly angular, base margin incomplete, attaining c. level of 4th stria. Four striae present, deeply impressed, and coarsely crenulate. 1st stria attaining scutellary puncture and apex, 2nd–4th striae gradually shortened at base and apex, apex widely glabrous. All intervals on disk raised. 8th stria complete, deeply impressed, impunctate. Recurrent stria fairly deep, short, oblique, at end incurved. 3rd interval bipunctate, the anterior puncture located at basal third, the posterior puncture located slightly in front of the apical third, both adjacent to 3rd stria. Intervals impunctate and without microreticulation, surface very glossy.

Lower surface. Not pilose, glabrous. Metepisternum slightly < 1.5 times as long as wide at apex. Terminal abdominal sternum in male bisetose.

Legs. Two basal tarsomeres of the male protarsus slightly widened, squamose underneath, and mediad tri-angularty dentate.

Male genitalia (Fig. 3). Aedeagus moderately elongate, stout in middle, triangularly narrowed towards apex, lower surface straight. Apex rather short, fairly stout, obtusely rounded; internal sac with several slightly twisted folds, one of which is heavily sclerotized. Parameres very dissimilar, the left one very large, triangular, the right one smaller but comparatively wide, both with three elongate apical setae.

Female gonocoxites. Unknown.

Variation. Very little variation noted.

Distribution

Brunei, Borneo. Known only from type locality.

Collecting circumstances

Not recorded.

Relationships

A rather unique species, apparently without close relatives.
Description of *Elaphropus martensi* n. sp. (Figs. 4, 8, 15)


**Etymology**  
The name is a patronym in honour of the collector Jochen Martens, well known explorer of the fauna of Nepal.

**Diagnosis**  
Characterized by black colour, cordiform pronotum with unifoveate basis, presence of only one distinctly impressed elytral stria, quadrimaculate elytra, and absolutely glabrous surface. Distinguished from the most similar species *E. stevensi* (Andrewes, 1925) by absence of the 2nd stria and distinctly crenulate base of the pronotum.

**Description**  

Colour (Fig. 15). Upper and lower surfaces black, elytra with four moderately distinct pale red spots. The humeral spot slightly triangular and extended from site of 4th interval to margin, the apical spot transverse, extended from 3rd interval to margin and well removed from apex that is slightly paler than the disk. Antenna, palpi, and legs yellow.

Head (Fig. 15). Of average size. Eye fairly large, lateral moderately produced, orbit comparatively elongate, c. ⅔ of eye length, oblique-convex. Labrum almost straight. Clypeus straight, clypeal suture distinct. Frons slightly convex, without any impression. Frontal furrows duplicated, short, deep, anteriorly slightly crossing to the clypeus, posteriorly turned lateral. Sulcus medially of the eye. Mandible, palpi and the lower surface of the head as in similar species of the subgenus. Antenna moderately elongate, 7th–10th antennomeres slightly < 1.75 times as long as wide. Dorsal surface impunctate and without microreticulation, very glossy, only labrum with superficial, isodiamic microreticulation.

Pronotum (Fig. 15). Wide, at base slightly wider than at apex; dorsal surface rather convex. Apex straight, apical angles not projected, very widely rounded. Lateral border convex, in basal fourth more or less deeply concave. Base laterally straight, in middle produced, basal angles slightly less than rectangular, acute, lateral even slightly projected. Lateral sulcus narrow, slightly widened in middle, narrowed basad. Apex laterally finely margined, base not margined except near basal angles. Median line fine, slightly deepened, neither attaining apex nor base. Anterior transverse impression not perceptible, posterior impression deep, distinctly crenulate, in middle with a large and deep pore. Basal grooves very deep, base near lateral margin with a short, slightly oblique, sharp carina. Anterior lateral seta inserted slightly in front of middle, slightly in front of widest diameter, posterior lateral seta inserted at basal angle. Surface very glossy, impunctate and without microreticulation.

Elytra (Fig. 15). Moderately elongate, not oviform, lateral margin in middle almost straight, wide at humerus; dorsal surface convex but depressed on disk. Humerus not angulate, obliquely rounded, basal margin incomplete, attaining c. level of 4th stria. Sutural stria distinct and complete, deeply impressed, not or very weakly crenulate; traces of 2nd stria in middle more or less distinct, but barely impressed. 8th stria complete, deeply impressed, impunctate. Recurrent stria fairly deep, short, oblique, at end slightly incurved. 3rd interval bipunctate, the anterior puncture located at basal third, the posterior puncture located slightly behind middle, both adjacent to position of 3rd stria. Surface impunctate and without microreticulation, very glossy.

Lower surface. Not pilose, glabrous. Metepisternum c. 1.5 times as long as wide at apex. Terminal abdominal sternum in male bisetose, in female quadrisetose.

Legs. Two basal tarsomeres of the male protarsus slightly widened, squamose underneath, and mediad triangularly dentate.

Male genitalia (Fig. 4). Aedeagus rather elongate, moderately stout in middle, triangularly narrowed towards apex, lower surface in middle slightly convex, but apical fourth markedly curved down. Apex very stout but rather elongate, obtusely rounded; internal sac with several slightly twisted folds, one of which is heavily sclerotized. Parameres very dissimilar, the left one very large, triangular, the right one smaller and narrow, both with a single elongate apical seta.

Female gonocoxites (Fig. 8). Gonocoxite 1 large, triangular, without any setae. Gonocoxite 2 fairly elongate, triangular, slightly curved, with rather acute apex. Two very small ventro-lateral ensiform setae situated about in middle, moderately separated, the dorso-median ensiform seta absent; one short subapical nematiform seta present near apex and originating from a circular pit.

Variation. Little variation noted in depth of sinuosity of the lateral margin of the pronotum and in distinctness of 2nd stria.

**Distribution**  
Nepal. Known only from the Singalila mountain range of the easternmost Nepal Himalaya close to the border to the Darjeeling District of India.
Collecting circumstances
Both specimens collected in forested area in river valley, but unknown whether by hand collecting or whether at light.

Relationships
In body shape and structure of elytra most similar and probably closely related to E. stevensi (Andrewes, 1925).

Description of Elaphropus grimmi n. sp. (Figs. 5, 16)
Holotype (♂): “Borneo, Malaysia, Sabah NE, Keningau, Bingkor, 380 m, 22.III.2013, R. Grimm” (CBM).

Etymology
The species name is a patronym in honour of the collector Roland Grimm, well known authority of Oriental Tenebrionidae.

Diagnosis
Characterized by unicolourous glossy black colour and hirsute elytra. Distinguished from the likewise hirsute E. barringtoni (Andrewes, 1925), E. interpunctatus (Putzeys, 1875), and E. hirsutus Baehr, 2014, by different number of elytral striae, in addition from E. interpunctatus by absence of the elytral spot, from E. barringtoni by the elytral striae almost attaining the base of the elytra, and from E. hirsutus by not deeply excised base of the pronotum.

Description
Measurements and ratios. Body length: 2.6 mm; width: 1.1 mm. Ratios: Width/length of pronotum: 1.32; widest diameter/width of base of pronotum: 1.34; width of pronotum/width of head: 1.38; length/width of elytra: 1.47.

Colour (Fig. 16). Upper and lower surfaces unicolourous glossy black, elytra unsotted. Antenna dark except 1st and basal half of 2nd antennomere. Palpi yellow, but the penultimate palpomeres piceous. Legs bright yellow.

Head (Fig. 16). Of average size. Eye large, laterad well produced, orbit very small. Labrum anteriorly straight. Clypeus straight, clypeal suture shallow. Frons slightly convex, without any impression. Frontal furrows not perceptibly duplicated, deep, slightly oblique, anteriorly slightly crossing to the clypeus, posteriorly slightly turned laterad. Sulcus medially of the eye deep. Mandible, palpi and the lower surface of the head as in similar species of the subgenus. Antenna moderately short, 7th–10th antennomeres slightly < 1.5 times as long as wide. Dorsal surface impunctate and without microreticulation, very glossy, only labrum with superficial, isodiametric microreticulation.

Pronotum (Fig. 16). Moderately wide, at base barely wider than at apex, dorsal surface very convex. Apex straight, apical angles not projected and widely rounded. Lateral border very convex, in basal fourth slightly concave. Base slightly convex, laterally slightly oblique, basal angles slightly more than rectangular, acute. Lateral sulcus very narrow, basad not widened. Apex laterally finely margined, base not margined except near basal angles. Median line very fine, inconspicuous, barely impressed, neither attaining apex nor base. Anterior transverse impression barely perceptible, posterior impression deep, little curved, distinctly crenulate, in middle with a very small, barely discernible puncture. Basal grooves deep, base near lateral margin with a very short, slightly oblique, sharp carina. Anterior lateral seta inserted about in middle, at widest diameter, posterior lateral seta inserted at basal angle. Surface very glossy, impunctate and without microreticulation.

Elytra (Fig. 16). Fairly elongate, not oviform but somewhat oblong-triangular, widest at humerus, lateral margin in middle straight and very slightly oblique; dorsal surface convex but depressed on disk. Humerus oblique and rounded, basal margin incomplete, attaining c. level of 3rd stria. Five striae present, deeply impressed, smooth. All striae, including 1st, at base slightly shortened, the inner ones slightly more than 5th stria. All striae except the sutural one ending far in front of apex, the outer ones more shortened than the inner ones, apex widely glabrous. All intervals on disk markedly convex. 8th stria complete, deeply impressed, impunctate. Recurrent stria short, deep, oblique, at end not incurved. Intervals with a row of elongate, erect setae which is much denser on the even intervals, surface therefore remarkably hirsute. Punctures on 3rd interval not discernible. Surface without microreticulation, very glossy.

Lower surface. Not pilose, glabrous. Metepisternum slightly < 1.5 times as long as wide at apex. Terminal abdominal sternum in male quadrisetose.

Legs. Two basal tarsomeres of the male protarsus barely widened, faintly squamose underneath, and mediad extremely indistinctly triangularly dentate.

Male genitalia (Fig. 5). Aedeagus short and compact, very stout in apical half, lower surface slightly concave. Apex very short and widely rounded; internal sac with several slightly twisted but little sclerotized folds. Parameres very dissimilar, the left one very large, triangular, the right one smaller, both with three elongate apical setae.

Female gonocoxites. Unknown.

Variation. Unknown.

Distribution
Sabah, Borneo. Known only from type locality.

Collecting circumstances
Not recorded.
Figs. 1-5. Male genitalia, aedeagus left side, right and left parameres. – 1. *Elaphropus serrulipennis* n. sp. 2. *E. schawalleri* n. sp. 3. *E. rafinus* n. sp. 4. *E. martensi* n. sp. 5. *E. grimmii* n. sp. – Scale bars: 0.2 mm.
Figs. 6-11. Female gonocoxites. – 6. Elaphropus serrulipennis n. sp. 7. E. schawalleri n. sp. 8. E. martensi n. sp. 9. Tachyta (Paratachyta) quadrinotata n. sp. 10. T. (Eurytachyta) laticollis n. sp. 11. Paratachys leytensis n. sp. – Scale bars: 0.2 mm.
Relationships

In body shape and structure of elytra very similar, and probably closely related, to *E. barringtoni* (Andrewes, 1925) from the Philippines and *E. interpolatus* (Putzeys, 1875) from Sulawesi.

4 Genus *Tachyta* Kirby, 1837


Type species: *Tachyta picipes* Kirby, 1837, by monotypy [= *Tachyta nana inornata* (Say, 1823)].

Diagnosis

The genus is characterized by absence of deep mental pits, elongate terminal palpmere, finely serrulate tarsal claws, and a straight, elongate recurrent stria that runs close to the lateral margin of the elytra.

Three subgenera have been described, two of which occur in the Oriental region, namely the nominate subgenus that covers depressed, mostly strongly microreticulated species, and *Paratachyta* Erwin, 1973 that includes a few small, less depressed, glabrous species. The third subgenus *Australotachyta* Baehr, 2013, is only known from northern Australia.

An additional subgenus is herein described for a single species of quite aberrant body shape that, however, possesses all determining character states of the genus.

4.1 Subgenus *Paratachyta* Erwin, 1975


Type species: *Tachys coracinus* Putzeys, 1875, by original designation.

Diagnosis

The subgenus originally was characterized by moderately convex body shape, glabrous surface, and presence of only the 1st and 8th elytral striae. In the meantime, however, a few species have been described that match body shape and glabrous surface, but possess more than one discal stria. The new species below likewise belongs to this group.

Description of *Tachyta (Paratachyta) quadrimaculata* n. sp. (Figs. 9, 17)


Etymology

The species name refers to the quadrimaculate elytra.

Diagnosis

Characterized by presence of three elytral striae and traces of additional ones, and glabrous, not microreticulate, quadrimaculate elytra. Distinguished from the similarly quadrimaculate species *T. quadriplagiata* Baehr, 2014 from Vietnam by lesser body size, shorter elytra, presence of only three, instead of five well developed elytral striae, and dark femora.

Description

Measurements and ratios. Body length: 2.25 mm; width: 1.05 mm. Ratios: Width/length of pronotum: 1.45; widest diameter/width of base of pronotum: 1.11; width of pronotum/width of head: 1.43; length/width of elytra: 1.33.

Colour (Fig. 17). Black, elytra with two pale red spots. The humeral spot extended from 4th interval to margin but not touching the base, the apical spot extended between 3rd and 6th interval and far removed from apex. Palpi, antenna, and legs bright yellow, but femora infuscate.

Head (Fig. 17). Of average size. Eye large, laterad well produced, orbit very small. Labrum anteriorly straight. Clypeus straight, clypeal suture barely indicated. Frons convex, without any impression. Frontal furrows elongate, deep, curved, attaining the posterior margin of the eye. Apical palpmere elongate. Antenna short, 7th–10th antennomeres slightly longer than wide. Dorsal surface impunctate and without microreticulation, very glossy, only labrum with superficial, isodiametric microreticulation.

Pronotum (Fig. 17). Wide, at base about as wide as in middle, narrowed to apex; dorsal surface gently convex. Apex with very shallow excision, apical angles barely projected and very widely rounded. Lateral border in basal half very slightly concave. Base laterally straight, in middle faintly produced, basal angles rectangular. Lateral sulcus deep, anteriorly narrow, basad slightly widened. Apex laterally finely margined, base laterally margined. Median line deeply sulcate, deepened basad, attaining apex and base. Anterior transverse impression only in parts perceptible, posterior impression deep, smooth, in middle with an elongate sulcus. Basal grooves barely perceptible, base near lateral margin with a short, slightly oblique carina. Anterior lateral seta inserted at apical third, posterior lateral seta inserted at basal angle. Surface impunctate, without microreticulation, very glossy.

Elytra (Fig. 17). Wide and short, oviform, lateral margin even in middle slightly convex; dorsal surface moderately convex. Three median striae distinct, though 3rd stria very short; only finest traces of additional striae visible. Median striae coarsely punctate, on disk impressed, 2nd and 3rd behind middle very weak, apical half widely glabrous. Two median intervals on disk slightly raised. 8th...
striata only in apical half present. Recurrent stria deep, elongate, oblique, situated close to the lateral margin, at end slightly incurved. Third interval bipunctate, the anterior puncture located at basal quarter and adjacent to 4th stria, the posterior puncture located in apical third and adjacent to 3rd stria. Intervals with a few extremely inconspicuous punctures. Microreticulation absent, surface very glossy.

Lower surface. Prosternum and mesosternum in middle with sparse, very short, erect pilosity. Abdomen not pilose. Metepisternum c. 1.3 times as long as wide at apex. Terminal abdominal sternum in female quadrisetose.

Male genitalia. Unknown.

Female gonocoxites (Fig. 9). Gonocoxite 1 comparatively large, markedly triangular, without any setae. Gonocoxite 2 fairly elongate, triangular, slightly curved, with fairly acute apex, with two large ventro-lateral ensiform setae and one very elongate subapical nematiform seta that origins from a circular pit.

Variation. Unknown.

Distribution
Nepal. Known only from type locality.

Collecting circumstances
Sampled in forested area in river valley but unknown whether by hand collecting or whether at light.

Relationships
In body shape and structure, and in coloration very similar, and probably closely related to *T. quadriplagiata* Baehr, 2014.

4.2 Subgenus *Eurytachyta* n. subgen.

Type species: *Eurytachyta laticollis*, n. sp., here designated.

Etymology
The name of the new subgenus refers to the wide pronotum of the single species.

Diagnosis
Subgenus of *Tachyta* Kirby, 1837 by virtue of absence of pits on the labrum, finely serrulate tarsal claws, and the elongate, straight recurrent stria that runs close to the lateral margin of the elytra.

Special characteristics are the remarkably wide pronotum with convex lateral margins and excised lateral parts of the base, short and wide, absolutely glabrous elytra, presence of a deeply impressed sutural stria and a very weak 2nd stria, total absence of the 8th stria, and insertion of both discal setae at the position of the 3rd stria.

The single species *Eurytachyta laticollis* has been recorded from Sabah, Borneo. For full description of the new subgenus see the description of that species.

In various respects this subgenus differs markedly from the three other subgenera of *Tachyta*, and likely it could be taken for a separate genus. However, the structure of the recurrent stria, the minutely serrulate tarsal claws, and the narrow and elongate apical palpmere convinced me to include it as a subgenus into the genus *Tachyta*.

Description of *Tachyta (Eurytachyta) laticollis* n. sp.
(Figs. 10, 18)


Etymology
The name refers to the unusual width of the pronotum.

Diagnosis
A large, wide species, characterized by the very wide, laterally markedly convex pronotum, in the middle strongly produced base and deeply excised lateral parts of the base, and wide, glabrous elytra with a well developed sutural stria and a very weak 2nd stria.

Description
Measurements and ratios. Body length: 3.1 mm; width: 1.45 mm. Ratios: Width/length of pronotum: 1.62; widest diameter/width of base of pronotum: 1.16; width of pronotum/width of head: 1.72; length/width of elytra: 1.43.

Colour (Fig. 18). Upper and lower surfaces black, iridescent, elytra unspotted, but margins of pronotum and elytra inconspicuously paler. Two basal antennomeres yellow (rest broken). Palpi and legs yellow.

Head (Fig. 18). Rather wide and short. Eye large, laterad well produced, orbit very small, almost perpendicular. Labrum anteriorly straight. Clypeus straight, clypeal suture barely indicated. Frons convex, without any impression. Frontal furrows elongate, deep, oblique, slightly surpassing middle of eye. Apical palpmores elongate. Both antennae broken from 3rd antennomere. Dorsal surface impunctate and without microreticulation, very glossy, only labrum with superficial, isodiametric microreticulation.

Pronotum (Fig. 18). Very wide, at base much wider than at apex, strongly narrowed to apex; dorsal surface rather convex. Apex straight, apical angles very widely rounded. Lateral border markedly convex, even near base not concave. Base in middle remarkably produced, lateral parts deeply excised, therefore the rectangular basal angles slightly produced posteriad. Lateral sulcus wide and deep, basad slightly widened. Apex completely margined, base laterally margined. Median line very inconspicuous, not impressed, neither attaining apex nor base.
Anterior transverse impression not perceptible, posterior impression deep, smooth, in middle widely interrupted. Basal grooves circular, deep, base near lateral margin with a short, oblique, not carinate swelling. Anterior lateral seta inserted very close to apex, posterior lateral seta inserted at basal angle. Surface impunctate, without microreticulation, very glossy and iridescent.

Elytra (Fig. 18). Moderately elongate, not oviform, lateral margin in middle straight; dorsal surface convex. Humerus evenly rounded. Sutural stria distinct and well impressed, smooth, 2nd stria very inconspicuous and only visible in basal half, other striae virtually absent. Only the sutural intervals raised. 8th stria completely absent. Recurrent stria deep, very elongate, oblique, situated close to the lateral margin, at end slightly incurved and ending in a pit. Surface bipunctate, both punctures located at position of 3rd stria; the anterior puncture located at basal sixth, the posterior in apical third. Surface impunctate and without microreticulation, very glossy and iridescent.

Lower surface. Prosternum and mesosternum apparently glabrous. Abdomen not pilose. Metepisternum slightly < 1.5 times as long as wide at apex. Terminal abdominal sternum in female quadrisetose.

Male genitalia. Unknown.

Female gonocoxites (Fig. 10). Gonocoxite 1 very large, triangular and globose, without any setae. Gonocoxite 2 fairly elongate, triangular, slightly curved, with acute apex, with two elongate, narrow ventro-lateral ensiform setae, the upper one being longer, one elongate dorso-median ensiform seta, and one elongate subapical nematiform seta that origins from a circular pit.

Variation. Unknown.

Distribution
Sabah, Borneo. Known only from type locality.

Collecting circumstances
Not recorded, but, according to the collector, probably sampled at light.

5 Genus Paratachys Casey, 1918


Type species: Paratachys austicinus Casey, 1918, by original designation.

Diagnosis
The genus is characterized by presence of deep mental pits, not duplicated, curved frontal furrows, smooth tarsal claws, absence of a carina at the basal angle of the pronotum, presence of two elytral punctures on disk, interrupted 8th elytral stria, presence of an elytral, at end incurved recurrent stria that is situated rather in the middle of the elytra, and presence of a setiferous puncture right in the curvature of the recurrent stria.

The genus is congruent with the triangularis-group of Andrewes (1925).

Description of Paratachys leytensis n. sp. (Figs. 11, 19)


Paratype (♀): same locality, but 27.II.1991 (CBM).

Etymology
The name refers to the occurrence of this species on the island of Leyte.

Diagnosis
Characterized by unicolourous, reddish-piceous, markedly iridescent colour, wide, cordiform pronotum, remarkably short and wide elytra, location of the anterior discal puncture at 4th stria, and elongate, straight recurrent stria with the puncture just inside the short apical curvature. Distinguished from all Oriental and Papuan species with similar structure of the elytra [e.g. P. fasciatus (Motschulsky, 1851)] by the remarkably short elytra.

Description
Measurements and ratios. Body length: 2.85–2.95 mm; width: 1.30–1.35 mm. Ratios: Width/length of pronotum: 1.60–1.62; widest diameter/width of base of pronotum: 1.26–1.27; width of pronotum/width of head: 1.50; length/width of elytra: 1.39–1.41.

Colour (Fig. 19). Upper and lower surfaces unicolourous reddish-piceous, markedly iridescent. Antenna, palpi, and legs yellow.

Head (Fig. 19). Rather wide. Eye large, but laterad moderately produced, orbit short, oblique-convex, c. 1/5 of length of eye. Labrum anteriorly straight. Clypeus straight, clypeal suture distinct. Frons convex, without any impression. Frontal furrows elongate, wide, and deep, evenly curved, not duplicated, anteriorly slightly crossing to the clypeus, attaining the posterior margin of the eye. Sulcus medially of the eye deep. Mandible elongate, little curved. Palpi elongate, pilose, apical palpmere narrow, fairly elongate. Antenna elongate, 7th–10th antennomeres c. 2.25–2.50 times as long as wide. Dorsal surface impunctate, with slightly superficial, isodiametric microreticulation, moderately glossy but rather iridescent.
Pronotum (Fig. 19). Wide, at base wider than at apex; dorsal surface gently convex. Apex with fairly deep excision, apical angles projected but widely rounded. Lateral border in anterior three fourths very convex, in basal fourth oblique and very slightly concave. Base laterally straight, in middle slightly produced, basal angles acute, about 100°. Lateral sulcus rather wide, basad slightly widened. Apex laterally finely margined, base not margined except near basal angles. Median line distinct, slightly impressed, deepened basad, neither attaining apex nor base. Anterior transverse impression barely perceptible, posterior impression deep, distinctly crenulate, in middle with a deep sulcus. Basal grooves deep, base without a carina. Anterior lateral seta inserted slightly in front of middle and of widest diameter, posterior lateral seta inserted at basal angle. Surface impunctate, only near apex and base with faint microreticulation, glossy and iridescent. The area behind the basal sulcus with some longitudinal sulci.

Elytra (Fig. 19). Wide and remarkably short, not oviform, lateral margin in middle straight, very wide at humerus; dorsal surface moderately convex but depressed on disk. Humerus widely rounded, basal margin incomplete, attaining c. level of 4th stria. Four or five striae more or less distinctly impressed, but less so laterad, other striae very inconspicuous, not impressed and only consisting of an inconspicuous row of fine punctures. The median striae more or less distinctly crenulate. At least 1st–5th striae attaining the base. All striae except the suttural one ending far in front of apex, the outer ones gradually more shortened than the inner ones, apex widely glabrous. Median intervals on disk slightly raised. 8th stria in apical half distinct and impressed, basad faded away, impunctate. Recurrent stria deep, elongate, oblique, at end incurved. 3rd interval bipunctate, the anterior puncture located at basal third adjacent to 4th stria, the posterior puncture located just inside the short apical curvature of the recurrent stria. Surface impunctate and without microreticulation, very glossy and iridescent.

Lower surface. Not pilose, glabrous. Metepisternum c. 1.75 times as long as wide at apex. Terminal abdominal sternum in female quadrisetose.

Legs. Shape and squamosity of male protarsus unknown. Male genitalia. Unknown.

Female gonocoxites (Fig. 11). Gonocoxite 1 elongate, triangular, without any setae. Gonocoxite 2 elongate, triangular, slightly curved, with acute apex; both, the ventrolateral ensiform setae and the dorso-median ensiform seta absent; one short subapical nematiform seta present and originating from a circular pit.

Variation. Very little variation noted.

Distribution

Island of Leyte, Philippines. Known only from type locality.

Collecting circumstances

Sampled in forested area at low altitude, but unknown whether by hand collecting, whether at light.

Relationships

Within the Oriental species of *Paratachys* that have the anterior discal puncture adjacent to the 4th stria, distinguished by the very short elytra, therefore relationships uncertain.

6 References


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