

~~DEC 2 1943~~

~~Div. Insects  
U.S. Nat. Mus.~~

The genus *Taeniorhynchus*  
Arribalzaga in the Dutch  
East Indies

by

J. Bonne-Wepster

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*Reprint from the Mededeelingen van den  
Dienst der Volksgezondheid in Ned.-Indië  
Part III, Anno 1930*



**SOUTH EAST ASIA MOSQUITO PROJECT  
DEPARTMENT OF ENTOMOLOGY  
SMITHSONIAN INSTITUTION  
UNITED STATES NATIONAL MUSEUM  
WASHINGTON, D. C. 20560**

G. Kolff & Co. Weltevreden



(From the medical Laboratory at Weltevreden)

THE GENUS TAENIORHYNCHUS ARRIBALZAGA IN THE  
DUTCH EAST INDIES,

by

J. BONNE-WEPSTER.

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PART II.

SUBGENUS COQUILLETTIDIA Dyar.

In a previous article <sup>1)</sup> an identification table and a description have been given for the subgenus *Mansonioides*. To recognize a *Mansonioides* species is a rather simple matter. Not so with the *Coquillettidia* species. With four of the 6 species of this subgenus, that have been found in the Dutch East-Indies, there are no difficulties. They are recognisable immediately by the bright or orange yellow color of integument or scales on certain parts of the body, legs or wings: *ochraceus*, *nigrochraceus*, *giblini* and *crassipes*. *Coquillettidia aureosquamata* LUDLOW and *Coquillettidia memorans* n. sp. however do not have these striking characters. All the known Dutch East-Indian *Coquillettidia* have unspotted wings. In the female the abdomen is normal, no strong teeth on hind margin of 8th segment. Of three species the males have been found here. They have the last two joints of the palpi turned downwards, subequal in length and very hairy. The *hypopygia* all show a basal lobe, which carries a long flattened and a hairlike appendage, the clasper is partly largely broadened and has in *crassipes* a distinct process about the middle. The lobes of the ninth tergite are small but distinct and carry moderately long hairs. The apical teeth on the tenth sternites are strongly chitinized. In *crassipes* the eighth abdominal segment is of a peculiar shape, in *ochraceus* and *giblini* it has a row of moderately long straight bristles on its apical margin ventrally.

Larvae of *Coquillettidia* have not been discovered yet in the Dutch East-Indies.

The characters of a *Coquillettidia* are as follows: A mosquito of moderate size with a straight proboscis which is not swollen at the tip; first submarginal cell longer than its stem; on the pro-epimeron several strong bristles present; last two antennal joints long and slender in the male as well as in the female; pulvilli absent; mesonotum covered with curved not metallic scales, bristles present; prothoracic lobes rather small with irregularly placed bristles; no scales or bristles on spiracular or postspiracular area; wingscales not broadened.

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1) See Mededeelingen D. V. G., 1930, p. 196.

Thorax or legs, or both mostly yellow or orange colored .....	1
Not so .....	3
1. Wings yellow scaled .....	2
Wings dark scaled .....	<b>crassipes.</b>
2. Thorax and legs bright yellow, few dark markings on integument of thorax .....	<b>ochraceus.</b>
Thorax yellow scaled, legs bright yellow, mesonotal integument black .....	<b>nigrochraceus.</b>
Legs yellow, mesonotal integument dusky yellowish with numerous dark markings.....	<b>giblini.</b>
3. A rather large mosquito with golden yellow scales all over the mesonotum .....	<b>memorans.</b>
Not such a large mosquito, front part of mesonotum with numerous creamy yellow scales more or less arranged in lines .....	<b>aureosquamata.</b>

*Taeniorhynchus (Coquillettidia) aureosquamatus* LUDLOW.

A dark mosquito of moderate size with purple and bluish metallic scales, especially on proboscis, legs and abdomen, and a conspicuously light marked mesonotum.

**Female.** Head: with dark upright forked and long narrow curved grayish white to creamy yellow scales on the *occiput*. The upright forked long ones have a brownish and in front a golden tinge in certain lights. The narrow curved scales are very small on the nape. Laterally down the sides there is a patch of broad flat creamy yellow scales. A few golden bristles along margins of eyes. *Clypeus* dark brown with grayish luster. *Antennae*: first segment brown with gray luster, second segment dark with base light brown, remaining segments dark. Long hairs dark, in certain lights golden brown, short hairs gray. *Proboscis* slightly curved, dark with numerous metallic bluish scales, most conspicuous on apical third. *Palpi* one fifth of the length of the proboscis, dark with metallic blue luster.

**Thorax:** *Prothoracic lobes* brown with coarse long dark bristles, which have the apex golden yellow in certain lights, and much shorter and finer golden yellow hairs, *Mesonotum* with dark integument, largely covered with long, narrow, curved creamy yellow scales, with a brassy luster in certain lights, lying close to the integument. Two distinct bare submedian lines present. The light scales medianly extend back to the bare antescutellar area and continue as two fine lateral borderlines of this space as far back as hind margin of mesonotum. The scales in these lines are shorter and very fine. There is a large patch of narrow curved dark scales over roots of wings, the light scales from the extreme lateral margin of mesonotum just touch the roots of the wings. The dark scales show in some lights brassy yellow reflections. The area over roots of

wings seems to lose its scales easily, showing a large bare spot of the dark integument. In certain lights the median creamy yellow line is rather dark in front of antescutellar area. Long coarse dark bristles present, very numerous over roots of wings and in some lights golden brown here. *Scutellum* with 4 golden bristles and a few small narrow curved creamy yellow to whitish scales on mid-lobe, each lateral lobe with 6 golden bristles. *Pleura* dark brown, with a large patch of flat white scales on sternopleura and mesepimeron.

**W i n g s:** uniformly dark with long narrow and slightly broader, symmetrical scales.

**L e g s:** Dark with metallic blue and purple scales, strongly iridescent on femora and tibiae, less so on tarsi. All femora have dusky grayish white scales behind, *midfemora* from base till apex, *front* and *hind* femora more than basal half. Tarsi in certain lights rather brown, in other lights with brassy luster.

**A b d o m e n:** Dorsally densely clothed with iridescent metallic blue scales; on the second to 8th segment a lateral basal patch of silvery white scales, this patch rather small and dusky on S II. S VIII with basal segmental band of light scales with brassy luster. In certain lights the lateral patches also have a slightly brassy luster. S I with golden hairs all over segment, remaining segments with these hairs on apices only. Venter metallic blue scaled, with yellowish to white basal bands on S II — S VII. S VIII with large lateral light patches only.

Length: body more than 4.5 mm; wing 3.5 mm.

Found in the Dutch East Indies: Sumatra (Dermajoe, Bengkoelen).

The male and the larva have not yet been found in the Dutch East-Indies.

*Taeniorhynchus (Coquillettidia) ochraceous* THEOBALD.

**Female.** **H e a d:** with creamy to golden yellow narrow curved scales on *occiput*, intermingled with golden yellow upright forked scales, which have slightly darker tips in certain lights. On the nape very light yellow small hair-like scales present. Golden bristles along margins of eyes. Laterally down the sides a patch of broad flat creamy yellow scales. *Antennae* with the basal joint light brown, like the base of the second joint; apex of second joint and all the remaining joints dark with numerous short, fine, light grayish hairs and sparse long hairs which vary in certain lights from light golden to blackish brown. In some specimens all of the second, third and fourth joints are rather light brown. *Clypeus* from yellowish to dark brown with grayish luster. *Proboscis* slightly bent; golden yellow scaled on basal third above, remaining part creamy yellow scaled with light metallic blue scales intermingled. Extreme tip black, as are also the labellae. *Palpi* with golden brown scales and golden hairs which are black in certain lights. A few purple metallic scales may be present.

**T h o r a x:** *Prothoracic lobes* yellowish with long coarse bristles and moderate rather fine hairs, both bristles and hairs from golden to dark brown in

certain lights. Integument of *mesonotum* bright yellow in front, darker more behind, over roots of wings black roundish spots, in some specimens four, in others some or all of these spots join into larger ones. Medianly in front the integument is usually darker than at the sides. Midlobe of *scutellum* bright yellowish brown, lateral lobes black. *Mesonotum* covered with narrow curved bright yellow scales and four rows of long coarse bristles of the same colour. Two bare submedian lines present. Antescutellar area bare. The space over root of wing very sparsely scaled. *Scutellum* with golden bristles on all lobes. Midlobe with a few small narrow curved scales besides. *Pleurae* yellowish with gray luster, broad dark brown to black stripes present. A patch of about 4 or 5 dusky yellowish-white long moderately broad scales present on sternopleura.

**Wings:** Veins closely covered with long, moderately broad yellow scales, slightly darker yellow on subcosta and first vein.

**Legs:** bright yellow scaled; above intermingled with scales which show a purple metallic hue in certain lights. *Frontlegs* with the femora creamy yellow beneath, at apex a number of dark brown scales; tibiae and tarsi apically dark brown scaled all round. *Midlegs* all creamy yellow beneath except apical third of femora which is yellow; the purple metallic scales above are more numerous than on front and hind legs, apical banding of joints rather inconspicuous above, absent beneath. *Hindlegs* as front legs, but the femora are yellow beneath at apical third, and the dark apical banding of the joints is much broader than on front legs. A very small basal dark spot on the hindtibia is quite distinct in some specimens.

**Abdomen:** Integument of abdomen light brown on S I and S II, remaining segments dark brown with black areas. Dorsally and ventrally closely covered with yellow scales, showing a purple metallic luster in certain lights. All segments dorsally with golden hairs at their apices, most numerous and all over segment on S I. Venter with golden hairs scattered all over segments. On S I the scales are yellowish brown.

Length: body 5.5 mm, wing: 4.5 mm.

**Male.** *Antennae* with the basal joint and bases of all remaining joints light brown, apices brown, last two or three joints almost black; long hair-whorls light golden-yellow, in certain lights creamy yellow. Small hairs of the same colour. *Palpi* golden yellow scaled on basal and long joint; penultimate joint golden yellow with a dark longitudinal stripe above, in certain lights the scales in this stripe have a purple metallic luster. Last joint dark with grayish luster. Penultimate and apical joint turned downwards, both joints with long stiff hairs.

**Legs:** The dark apical markings on the joints of the mid legs are more pronounced than on midlegs of the female.

**Abdomen** with integument of basal segments lighter than in the female, apical segments and side-pieces very dark. Golden hairs very numerous.

S VIII with about 8 or 10 short straight bristles on apical margin ventrally. Coloration similar to that of female.

Length: body 6 mm; wing 4.5 mm.

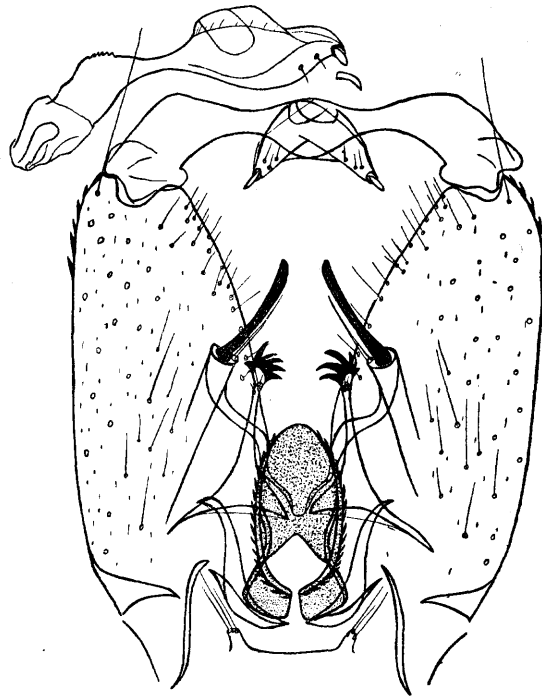


Fig. 1

**Hypopygium:** (Fig. 1): Side-pieces twice as long as broad, minutely hairy all over surface, sparse moderate hairs present besides very long ones scattered all over side-pieces. These long hairs very easily fall off and are usually only visible in unmounted specimens. Fine hairs on inner surface rather scarce. Six strong short teeth at apical outer margin. All the scales in our mounted specimens have fallen off. Clasper broad at base and at apex with slender middle part, rather irregularly shaped at outer portion, with delicate hairs and a blunt terminal spine. Basal lobe moderately long with one long flattened curved appendage, and a straight hair, shorter than the appendage. Lobes of the ninth tergites very slender, distinct, each lobe with three hairs. Basal plates slender, simple, parameres with long and slender outer portion. Mesosome simple, coarsely serrated all round. Tenth sternites very slender with 6 sharp strongly chitinized teeth at apex and three delicate hairs just below.

There is some variety in the coloration of the mesonotal integument, some specimens in the collection having no dark area's over roots of wings at all, others not showing the bright yellow color where it is described, but a more yellowish brown. There are specimens which have all the lobes of the *scutellum*

yellowish brown. In the original description of ochraceous no dark area's on *mesonotum* are mentioned, this part being described as ochraceous brown. No differences are found however in the male hypopygia.

Found in the Dutch East-Indies on Sumatra: Lho Soekon, Singkel, Dramajoe; on Riouw: Tandjong Pinang; on Java: Weltevreden; on New Guinea: Upper Digoel.

*Taeniorhynchus (Coquillettidia) nigrochraceus n. sp.*

**Female.** Head: with narrow, curved creamy yellow scales on the *occiput*, along margins of eyes these scales are slightly larger; scattered upright forked creamy yellow — in certain lights yellowish brown—scales between the narrow curved ones; long golden yellow hairs along margins of eyes. Broad flat creamy yellow scales laterally down the sides. *Palpi* light brown. *Clypeus* brown with grayish luster. *Proboscis*. Extreme base brown, gradually becoming lighter apically, apical half creamy yellow, except the dark brown tip. *Antennae* with basal joint grayish brown, next three joints brown, remaining joints dark brown, except the lightbrown insertions of the hairs. Long hairs from brown to yellow.

**Thorax:** *Prothoracic lobes* without scales, with moderate long brown hairs with golden luster. Integument of mesonotum black with bare area's, covered parts clothed with light golden yellow scales, slightly darker behind. The scales are arranged as follows: two large spots on front part of thorax, a bare median line present. On middle third of *mesonotum* there is a median stripe of scales. On caudal half are 2 sublateral lines of scales. Over root of wing a group of scales. Long golden yellow hairs on front margin and on caudal half of mesonotum. Scutellar scales narrower and smaller than those on mesonotum, colour the same. *Pleurae* black with grayish luster. Some scales on sternopleura and mesepimeron present.

**Wings:** with light golden yellow scales.

**Legs:** scaled from creamy yellow to yellowish brown. Apices of tibiae and tarsi dark, most distinct on hindlegs, obsolete on lower surface of front and midlegs.

**Abdomen:** with the integument black. Dorsally many golden brown scales present (our specimens partly denuded) especially close together on apical segments. Yellow hairs on apices of segments. Abdomen ventrally nearly entirely denuded. The scales which are present are light brown.

Found in the Dutch East-Indies: New Guinea (Upper Digoel), Sumatra (Dramajoe). The only difference between the specimen from Dramajoe and those from Upper Digoel is that the first submarginal cell in the former is  $3\frac{1}{2}$  times as long as its stem and in the latter specimens  $1\frac{1}{2}$  times. The name *nigrochraceus* was suggested by Dr. S. L. BRUG.

Type specimen No. 17.478 of the Collection in the Medical Laboratory at Batavia.

*Taeniorhynchus (Coquillettida) memorans n. sp.*

**Female.** H e a d: with creamy yellow narrow curved scales on *occiput* intermingled with upright forked dusky yellow scales. Along margins of eyes the scales are closely together. Laterally down the sides flat broad somewhat lighter creamy yellow scales. Long golden hairs along margins of eyes. *Proboscis* strong, long, though slighter shorter than abdomen, apical part distinctly bent, beautiful shining violet blue scales present, besides delicate golden hairs. *Palpi* about one fifth of the length of the proboscis, scales darker than on proboscis, delicate golden hairs and long stiff darker hairs present. *Clypeus* dark with grayish luster. *Antennae*: S I dark brown with lighter spots and grayish luster. Delicate dark hairs on S I, rather numerous and regularly placed on median surface. S II lightbrown on basal half. Remaining segments very dark with short gray hairs and long dark ones, which are grayish brown in certain lights.

**T h o r a x:** *Prothoracic lobes* darkbrown till black with long stiff hairs from dark brown to lightbrown and golden short fine hairs. No scales present in our single specimen. Integument of *mesonotum* brown with darker (nearly black) area's. All scales bright golden yellow, narrow, rather long, slightly curved, some of the scales are quite straight; nearly all lying rather irregularly flat against integument. Long stiff hairs present from dark brown till golden. *Scutellum*. Integument partly very dark, partly light brown. No scales present, though they may have fallen off from midlobe. All lobes with long golden brown hairs. Halteres brown with dark brown knob, the latter covered with small flat broad scales, with light metallic luster. *Pleurae*. Dark with light brown stripes. Proëpimeron with at least 6 golden hairs and two scales, narrow long, grayish white. These scales may have fallen off from somewhere else. On sternopleura and mesepimeron a large patch of flat, broad white scales.

**L e g s:** Shining metallic violet blue. All femora covered behind on basal third with dusky brownish yellow scales, which on front femora also show above and form more or less a basal band. No other banding on legs.

**W i n g s:** Along costa en subcosta and basally on L I shining metallic scales. On other veins dark brown scales which are on apex of wing lighter in certain lights. Outstanding scales long, narrow, those more apically slightly shorter and broader.

**A b d o m e n:** Dorsally S I with dusky lightbrown scales, some of these with violet luster. Many outstanding long golden hairs all over segment. S II, III and IV with shining metallic violet blue scales. S V, VI, VII and VIII with brass coloured scales, some of these with metallic violet blue luster. All segments with denuded area's. Golden hairs on S VIII very numerous, on other segments less so. On S III and S IV laterally basally some brass coloured scales. Ventrally abdomen covered with metallic violet blue and brass

coloured scales. The former predominant on basal segments, the latter on apical segments.

Length body: more than 6 mm; wing 5 mm.

Found in the Dutch East-Indies on New-Guinea (Upper Digoel).

Type specimen No. 15.150 from the collection in the Medical Laboratory at Batavia.

*Taeniorhynchus (Coquillettidia) giblini* TAYLOR.

A mosquito of moderate size, with dark banded legs, a yellow head, yellow scaled wings and a yellow scaled thoracic integument, which is dull yellow with much darker area's.

**Female.** H e a d: On *occiput* golden yellow narrow curved and upright forked scales, the latter in certain lights quite dark, especially at the tips. Along eye margins the narrow curved scales are lying rather flat. Golden bristles bordering eyes. Laterally down the sides a patch of flat not very broad scales, creamy yellow. *Antennae*. First lobe brownish; excavation of first and base of second lobe yellowish, apex of second and remaining joints dark brown, clear brown in certain lights. Short hairs whitish, long hairs golden, darker in certain lights. *Palpi* yellowish brown, a few metallic light blue scales present, hairs brown, very dark at apex of palpi. *Proboscis* from golden at basal to yellow at apical half. Tip black, the same as labellae. *Clypeus* yellowish brown.

**T h o r a x.** *Prothoracic lobes* bright yellow with long coarse bristles and hairs about half the length of the bristles. Both hairs and bristles dark brown, with golden reflections in certain lights. Integument of *mesonotum* dusky yellow, with brownish and black markings as follows: on anterior third two large lateral brownish area's, two blackish submedian lines running from anterior margin of thorax till antescutellar dusky yellow bare space, two large and one small black spot over roots of wings, two blackish lines bordering antescutellar bare space laterally. Black area's nude, brownish black parts hardly scaled, the golden yellow curved very narrow scales arranged on remaining part of mesonotum. Rows of golden brown bristles present. *Scutellum* with the mid lobe yellowish, lateral lobes black. Hairlike curved golden yellow, sparse scales on mid lobe, if present at all. Four golden brown bristles on mid lobe, 7 on each lateral lobe. *Pleurae* dusky yellow with 3 rather broad black longitudinal lines. Proëpimeron brownish. About 2 or 3 pale creamy yellow scales on sternopleura. Bristles dark brown with golden base.

**W i n g s:** with moderately broad, long scales, golden yellow; on basal half of costa, subcosta and L. I metallic violet blue ones present, numerous on subcosta.

**L e g s:** *Front legs* with femora light golden yellow with scattered metallic violet brown scales. A dark patch at apex. Front tibiae with golden yellow

scales; above are numerous shining metallic violet-brown scales, a dark sub-basal spot and a nearly complete dark band at apex. Fronttarsi golden yellow with an apical violet brown band, broad above, narrow or incomplete beneath, on T. V rather obsolete. *Midlegs* with femora light golden yellow beneath, slightly darker at base and apex. Above golden yellow, speckled with metallic violet brown scales. Midtibiae golden yellow with scattered metallic violet brown scales above, very numerous on basal half, a dark spot at apex. Midtarsi golden yellow with a very small dark spot at apex. *Hindlegs* with femora very light golden yellow beneath, apex golden yellow. Above golden yellow, speckled with metallic violet brown scales from base till apex. Hindtibiae golden yellow scaled with broad basal and narrow apical band of metallic violet brown scales. Scattered metallic violet brown scales sparse. Hind tarsi golden yellow with apical bands of metallic violet brown scales, very broad on T I, II, III and IV, on T V not quite distinct in every light.

**A b d o m e n :** Numerous golden yellow and violet brown scales on dorsal surface. S I golden yellow scaled with a small median apical spot of violet brown scales. S II, III and IV broadly golden yellow scaled basally, an apical band of metallic violet brown scales, this band is broadened medianly. On S V the apical band is very narrow, only the triangular apical median patch distinct, on remaining segments hardly any metallic violet brown scales visible. Golden hairs on apices of segments. Venter of abdomen entirely golden yellow scaled.

There are specimens in which the light scales on the abdomen are not quite golden yellow, but more orange yellow or even light brownish yellow. In certain lights there may be a pinkish iridescence all over dorsal surface of abdomen. One specimen in the collection is a very dark one, having the pleurae black and also the mesonotum, except for a tiny brownish yellow lateral spot near front margin.

Length: body 6 mm; wing 5 mm.

**Male.** *Antennae* with numerous closely set hairs in whorls, except on last 3 joints where there are only a few moderately long ones at base of penultimate joint. Long hairs from golden yellow till brown. Segments golden brown with grayish base. Short hairs whitish. *Palpi* longer than proboscis, orange yellow, in certain lights with a slightly darker stripe above, penultimate and apical segment all covered with metallic violet brown scales, except for a light stripe on inner surface of penultimate joint. Apical, penultimate and apex of long joint with rather long orange yellow hairs. *Proboscis* golden yellow with utmost tip black. Labellae dark with grayish luster. Coloration similar to that of female, with the following exceptions: Curved scales on the *head* and *mesonotum* lighter, lateral lobes of *scutellum* with 5 bristles only; *abdomen* with the dark dorsal apical bands very narrow, so that the dorsum of the abdomen is very light, pinkish iridescence all over surface.

Length: body 6 mm; wing 5 mm.

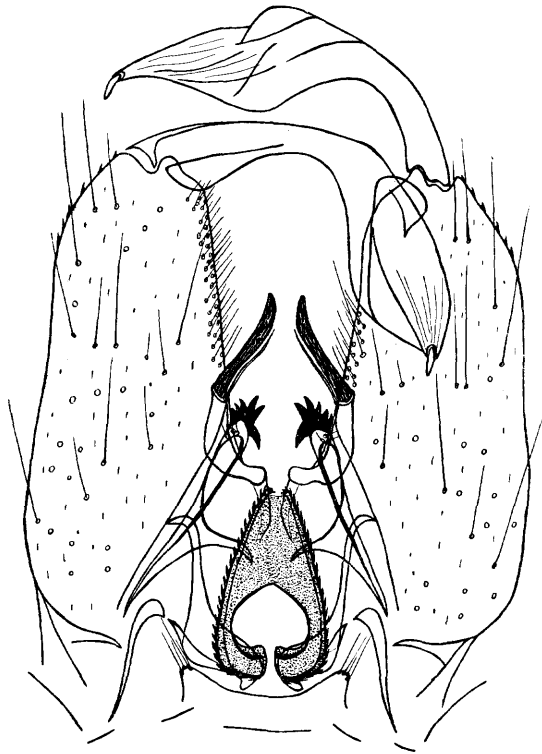


Fig. 2

Hypopygium: (Fig. 2) Side-pieces over twice as long as wide, minutely hairy all over, moderately long hairs present, very closely set fine hairs on inner surface. Outer margin towards apex with about 6 very short stout spines. Clasper broadly distended at outer third, rather irregularly shaped, with terminal blunt spine. Basal lobe moderately long with one long stout curved flattened and a curved hairlike appendage, the latter shorter than the former. Lobes of the ninth tergite small, distinct, each lobe with 4 hairs. Basal plates long, slender, simple; parameres with a broad base and slender apical portion. Mesosome simple, coarsely serrated all round. Tenth sternites slender with 6 strongly chitinized teeth at apex and 3 delicate hairs just below these.

Found in the Dutch East-Indies: on Sumatra (Atjeh, Bengkoelen); Nias, Celebes (Mamoedjoe).

*Taeniorhynchus (Coquillettidia) crassipes* VAN DER WULP.

A mosquito of moderate size, with the integument of the *mesonotum* orange coloured, or very light brownish yellow. Tibiae, tarsi and wings dark scaled; especially the former with strong metallic shine, no bands.

**Female.** Head: Small very narrow, curved light creamy yellow scales on the *occiput*, scattered with upright forked golden yellow ones, which are more golden brown in certain lights. Along the margins of eyes the curved scales are slightly broader and lying rather flat, and laterally down the sides is a spot of rather broad flat very light creamy yellow scales. Long coarse golden yellow hairs along margins of eyes. On the nape the curved scales are very small and narrow. *Clypeus* black. *Antennae* with the basal segment and the base of the second joint yellowish brown, the remaining part of the antennae is very dark, nearly black, with fine short grayish hairs and long dark ones, which are slightly shining metallic in certain lights. *Proboscis* and *palpi* curved with dark brown nearly black scales, which are beautiful shining metallic violet. Short golden hairs between the scales on the proboscis. Labellae black. Hairs on the palpi moderately long, golden brown to dark brown in certain lights.

**T h o r a x:** *Prothoracic lobes* bright yellow with golden yellow long and moderately long coarse hairs. In certain specimens the prothoracic lobes are light yellow brown, which may be due to discoloration. Integument of the *mesonotum* bright orange yellow with a slightly darker area in front laterally, and over roots of wings. Certain specimens have also a slightly darker area medianly.

Scales on the mesonotum not very numerous, curved, narrow, bright golden yellow. Longitudinal rows of dark long coarse hairs, which have a golden yellow tip in certain lights. Antescutellar area bare. *Scutellum* bright yellow, without scales, but with long coarse dark hairs as on mesonotum. *Pleurae* from yellow to orange brown, with some dark area's. On sternopleura and mesepimeron a large patch of flat rather broad silvery white scales.

**W i n g s:** with long rather narrow scales; on L I and L II these scales are somewhat longer and narrower than on the remaining veins and are distinctly outstanding, especially in the middle of the wing. Scales dusky brown, on costa and subcosta shining violet, in certain lights also on the basal part of the other veins.

**L e g s:** shining metallic violet. Femora basally with some golden yellow scales.

**A b d o m e n:** S I dorsally dark with purple in certain lights shining metallic violet scales in the middle, S II and S III entirely covered with beautiful metallic violet blue scales. S IV as S III, but laterally mixed with some creamy yellow scales with a pinkish shine. In some specimens there is a narrow basal band of such light scales on S IV. S V as S IV but the light scales form two large lateral basal patches coming close to median line, the light scales are dusky creamy yellow till golden yellow. On S VI, S VII and S VIII the golden yellow, in certain lights metallic pinkish iridescent scales are much more numerous than the violet ones. In certain specimens the three apical segments are entirely light scaled, or there are indications of basal light bands on S II,

S III and S IV. The apical segments are closely covered with yellow hairs. The pattern of the dorsum of the abdomen is rather variable. Ventrally the segments are creamy yellow scaled, in most specimens there are some metallic blue scales apically.

Length: body 4.5 mm; wing 4 mm.

**Male.** *Palpi* longer than the proboscis, apices of joints and last joint very dark violet scaled. Many coarse moderately long hairs on the last segment, on inner surface of the penultimate and on the inner surface of the apex of long joint.

*Antennae* with the first segment light brown, next segment yellow brown, with dark insertions of hairs, remaining segments also yellow brown. In certain lights all segments except the first and second may be dark. The long hairs are very numerous, darkbrown with lighter area's in certain lights. The integument of the *thorax* is in certain specimens somewhat lighter, in others somewhat darker than in the female. The dark shoulderparts may be absent. The flat broad scales on sternopleura and mesepimeron are silvery white as in the female, but more numerous, especially on mesepimeron. The light basal parts on the femora are much more distinct in the male than in the female. On the abdomen are, except on S I, in certain specimens basal creamy yellow segmental bands, though very narrow on S II, III and IV. Sidepieces dark. S VII ventrally with a large tuft of very long hairs, S VIII narrow on ventral side, hairy laterally, though no long hairs like on S VII. In dorsal view S VIII is very much enlarged medianly partly lying as a triangular piece of chitin over hypopygium, moderate hairs on apical margin. Side-pieces very bristly in dorsal as well as in ventral view.

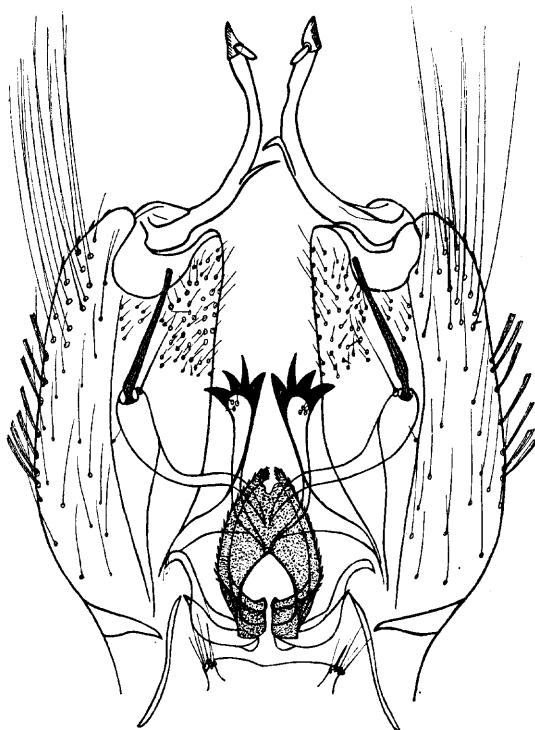


Fig. 3.

**Hypopygium:** (Fig. 3) Side-pieces not over twice as long as wide, a bunch of very long hairs towards apex, on inner surface apically a roundish patch of delicate hairs right on side-piece, no lobe present apically. Moderate hairs all over sidepieces, scales present on outer margin, 4 moderate teeth at outer margin, near apex. Clasper with broad base, slender stem with distinct process about the middle, apex folded over, a blunt spine present. Basal lobe of sidepiece moderate, a very large flattened appendage and a hair at apex, the hair about half the size of the appendage. Basal plates slender, parameres not very long, apical half slender, mesosoma simple, coarsely serrated all round. Lobes of the 9th tergite slender, each lobe with 6 hairs. Tenth sternites slender, rather short, apex with 4 very large strongly chitinized teeth, and 3 delicate hairs just below.

Length : body 4.5 mm; wing 3.5 mm.

Found in the Dutch East Indies: on Java (Weltevreden); on Sumatra (Dramajoe, Kotta Tjane, Sidikalang); on Borneo (Kendangan); on New Guinea (Upper Digoel) and on the Aroe-islands.