

A new species of genus *Latimbus* STÅL from Côte d'Ivoire (Hemiptera: Heteroptera: Coreinae)

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Abstract

Latimbus diomandei sp. nov. is a new species of Coreinae which was obtained by Côte d'Ivoire from Man city. For now, it has been identified four species belonging to the genus *Latimbus*. They come from our crops and different entomological collections. This new species was compared with those already existing and with those from the Royal Museum for Central Africa in Tervuren (Belgium). The differences observed are the level of the mode of insertion of the antennae, pronotum, humeral angles and abdominal segments ends.

Keywords: heteroptera, coreidae, coreinae, *latimbus*, Côte d'Ivoire

1. Introduction

Tribe Latimbini STÅL (1873) includes several genera of which two are currently encountered in Côte d'Ivoire^[1]. These are the genus *Latimbus* STÅL, 1859 and *Ptyctus* STÅL, 1873. The genus *Latimbus* include several species in Central Africa which have been described by^[2]. The specimens of this type are characterized by a sloping hillside pronotum and prominent humeral and acute angle^[2]. Work has been carried out in Central and West Africa and Madagascar^[3] but rare in Côte d'Ivoire.

Heteroptera Coreidae are generally represented by herbivorous species that cause damage to several crops namely industrial crops, food, vegetable^[4, 5, 1, 6]. They are also present in wild plants that serve their shelters mostly^[1].

In Côte d'Ivoire, there are four species (with one new): *Latimbus armipes* STÅL, 1860; *Latimbus kollerii* SCHOUTEDEN, 1911 and *Latimbus punctiventris* (SIGNORET, 1858). During the entomological missions in several localities of the country, are those conducted in the Man City who helped raise this new species.

The collected specimens were compared with species from the collection of the Royal Museum for Central Africa in Tervuren (Belgium). These comparisons show clearly that this is a new species that is described in this article.

2. Materials and methods

The work focused on a total of 111 specimens of the genus *Latimbus*. Our study includes a description of species collected in the country with a share of descriptions by different authors worldwide. It is those of^[7] which revised the subfamilies Coreidae Africa, Asia and Australia and those of^[2], the catalog presents the Coreinae the Belgian Congo. Secondly comparing them with those contained in the collection of the Royal

Museum for Central Africa. Dissections of genital parts were made to differentiate species. All species have been described and a key has been established for their recognition.

3. Results and Discussion

3.1 Systematic

Family : Coreidae Leach, 1815
Subfamily : Coreinae Leach, 1815
Tribe : Latimbini STÅL, 1873
Genre : *Latimbus* STÅL, 1859

3.2 Characterization of the different species

3.2.1 *Latimbus punctiventris* SIGNORET (1858)

Synonyms : *Homoeocerus punctiventris* SIGNORET

Description

Male length: 15 mm (Figure 1 a); female length: 14 mm (Figure 1b). This species is recognizable by its yellowish-brown color to brown with a black longitudinal center line between the ocelli. The antennae are fixed in a notch of the lateral lobes (juga) (Figure 1c). The side edges of the pronotum are concave, carriers of small black tubers, the posterior part with a disc. The very prominent humeral angles are erected in subacute spines black. The ventral side is dotted with brown from light brown or dark red, with each side yellowish longitudinal line, leaving the insertion of the forelegs and extending to the male sexual abdominal segment, it sinuous distally with two protuberances obtuse in the middle separated by a small sinus. In the female, this line is black. Sternites II to V have two black spots in the stigma. Abdominal end of the male is rounded (Figure 1 d). Spermathecal has a swollen bulb monitoring of the wound area that leads to the neck funnel, the sperm of the conductive channel leads to the genital chamber (Figure 1 e).

Specimens examined in Côte d'Ivoire

Taï 19-II-74 (3 males and 2 females), 7-VIII-77 (2 males), 19-II-77 (1 female), 7-X-77 (2 males), 22 / 29-VI-79 (2 males and 2 females); 26-VI-79 (1 male), 27-VI-79 (3 females); Tnhou XII-77 (4 males and 2 females); 12-I-80 (1 male and 2 females), 19-II-80 (2 males and 2 females) collected by Tau; Museum Paris 2-II-42 harvested by Lamotte in Guinea Yalanzou.

Specimens examined in Royal Museum for Central Africa

Ilenge (1 ° 59S, 19 ° 52E) I-1918 collected by R. Mayné; Ituri (1° 51N 29 ° 58E) VIII-1925 collected by Schouteden; Flandria Equator (0 ° 22S, 19 ° 04E) 3-III-1932 collected by Hulstaert; Bambesa (3 ° 26N 25 ° 39E) V-1933 collected by H. J. Bredo; Penge (6 ° 06S, 24 ° 37E) VI-1933 collected by Putman; Kibali-Ituri (1 ° 51N 29 ° 58E) IX-1936 collected by Ch. Scops.

3.2.2 *Latimbus armipes* STÅL, 1859

Synonyms : *Latimbus holasi* VILLIERS (1950), *L. armipes* STÅL (1859)

Description

Male length: 13.5 mm; female length: 12 mm. This species is close to *L. punctiventris*. It is however distinguished by in the clearest elytra, the posterior part of the corium with a whitish

acute angle inwards (Figure 2 a); by the absence of the longitudinal median black line between ocelli; by the presence on the ventral side of a median longitudinal strip dark green to chocolate brown (Figure 2 b), by the male genital segment truncated distally with rounded angles (Figure 2 c); while the outer region remains much clearer. The side edges of the pronotum are black, almost straight. The antennae are darker. The parameres have lobed extremity with setae on the apex and the ventral side (Figure 2 d). Spermathecal has a swollen bulb smaller than that of *L. punctiventris* followed the wound area that leads to the neck funnel, a larger sperm conducting channel opens into the genital chamber (Figure 2 e).

Specimens examined in Côte d'Ivoire

Bingerville I-39 (1 male); Irobo (Grand Lahou); Grand-Lahou 20-IX-77 (1 male and 1 female) collected by Taou.

Specimens examined in Royal Museum for Central Africa

Kikwit (5 ° 01S, 18 ° 47E) XII-1920 collected by Vanderijst; Uele Dingila (3 ° 39N 26 ° 07E) 20-VII-1931 collected by J. Leroy V; Lulua Kapanga (8 ° 20S, 22 ° 40E) 18-XI-1932 collected by F. G; Overlaet; Bambesa (3 ° 26N 25 ° 39E) 1934 collected by R Fr. Longinus; Route Bikoro (0 ° 44S, 18 ° 06E) V-1936 collected by Ghesquière; Terr. Dibaya of Kamponde (6 ° 44S, 22 ° 55E) 1945 collected by Rev. Fr. Allaer.

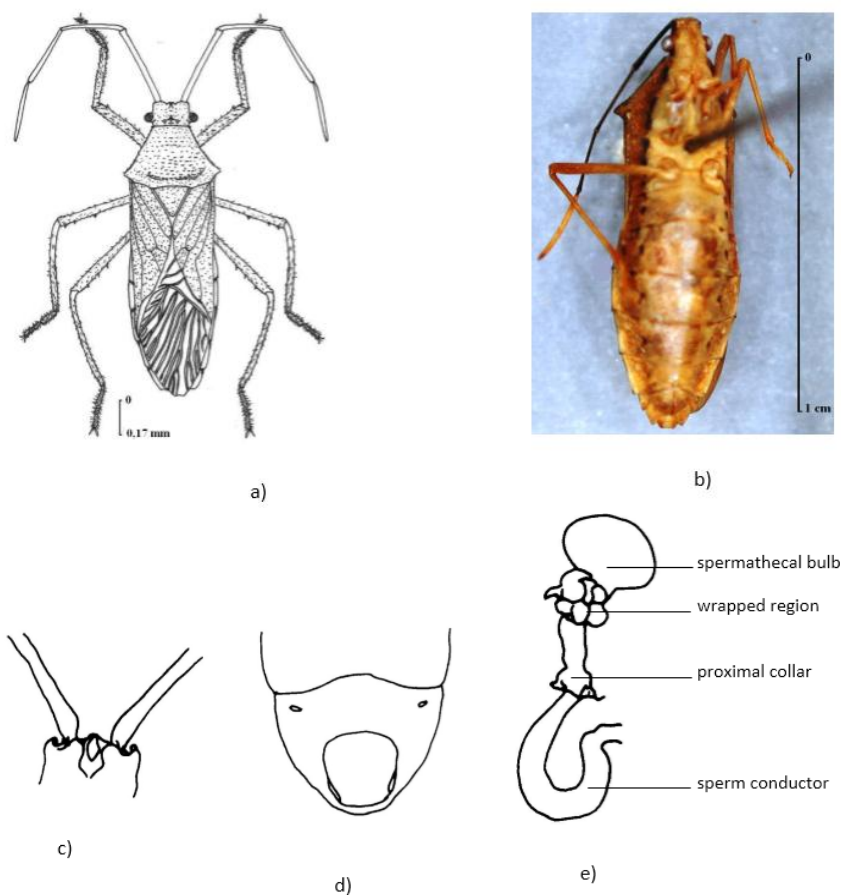


Fig 1: *Latimbus punctiventris* (a. dorsal view; b. ventral view of female; c. base insertion of antennae; abdominal end of a male; e. spermathecal)

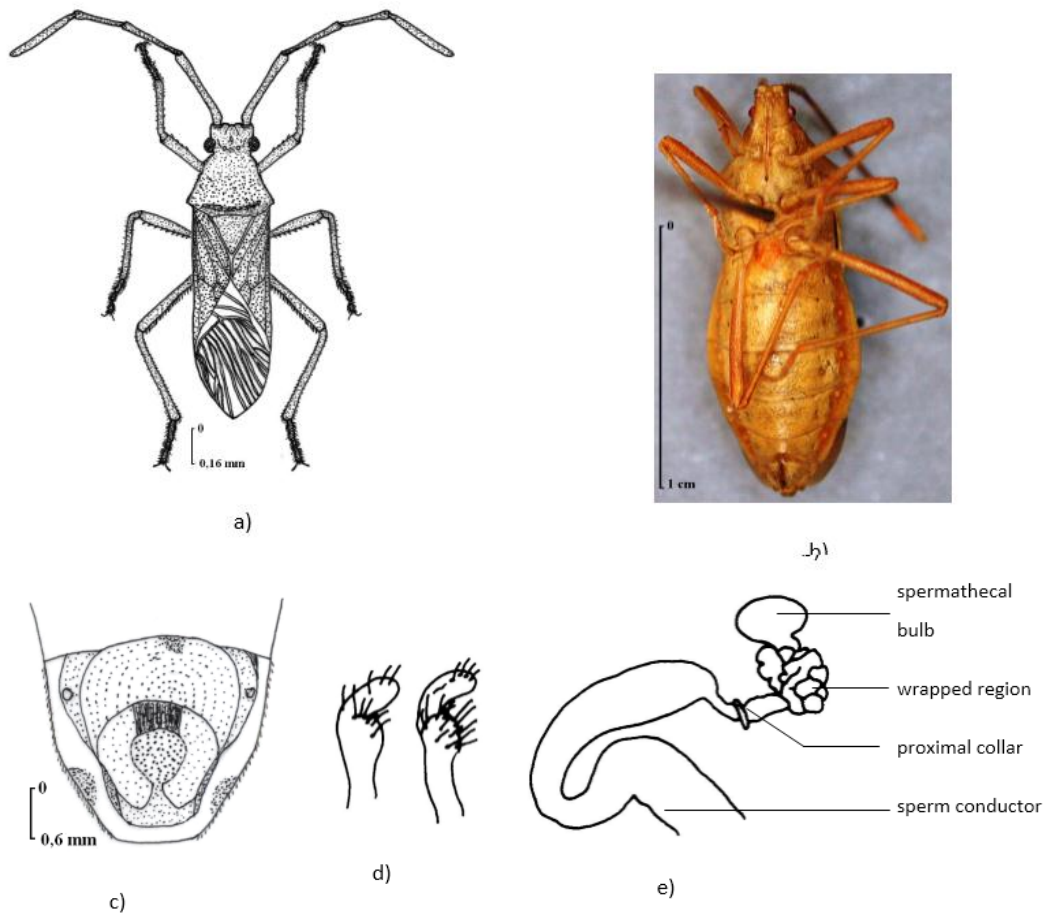


Fig 2: *Latimbus armipes* (a. dorsal view of the male; b. ventral view of female; c. male abdominal end of; d. parameres; e. spermathecal)

3.2.3 *Latimbus kolleri* (Schouteden, 1911)

Description

Male length: 13 mm; female length: 13 mm. *Latimbus kolleri* (Figure 3 a) is near to *L. punctiventris* with all indicated characters. However, he is distinguished by the lighter coloring; the darker median line between the ocelli; by pronotum which is crossed longitudinally by a yellow line. In front of this line, there is another black line, short either side of the yellow line. Inserts of connexiva are black. The abdominal extremity of the male is trisinuate distally, outside are two stronger teeth, two large tuberculous prominences are in the middle (Figure 3b).

Specimens examined in Côte d'Ivoire

Man 1-IX-77 (1 male), 2-X-77 (1 male); Tinho 20-I-80 (1 male) collected by Tau. ; Evodoula (Cameroon) 18-I-53 (1); 1-IX-53 (1) collected by not mentioned.

Specimens examined in Royal Museum for Central Africa

Dima (3 ° 19S, 17 ° 28E) 24-IX-1908 collected by A. Koller; Bas Congo (5 ° 11S, 14 ° 15E) 15/31-VII-1921 collected by Dr. Schouteden.

3.2.4 *Latimbus diomandei* sp. nov.

Description

Male length: 14 mm; female: 14 mm. The general color is yellowish-brown to black dots. The head is flattened significantly ahead; it has no black line between the ocelli. The antennae are located in a recess of the side lobes (jugas) well developed forward antennal tubercles (Figures 4 a and b). Antennal segment I is orange-brown of the same length that segment IV, which is blackish brown. Antennal segment II is longer than the III, the latter being the shortest. These segment are the same color as the first, but blackish distally. The total length of the antenna is 12.5 mm. The segment I of the rostrum is a little less short than IV; II and III are equal in length and shorter than previous ones. The pronotum is yellow; the side edges are straight and black. The humeral angles are prominent with acute spine in females and subacute in males. In male forelegs and intermediate possess a row of spines on the outer side, more numerous on hind legs and a row of thorns on the internal surface (Figure 4a). The ventral side is orange, punctuated with brown. The abdominal segments II to VI each have a black lateral spot.

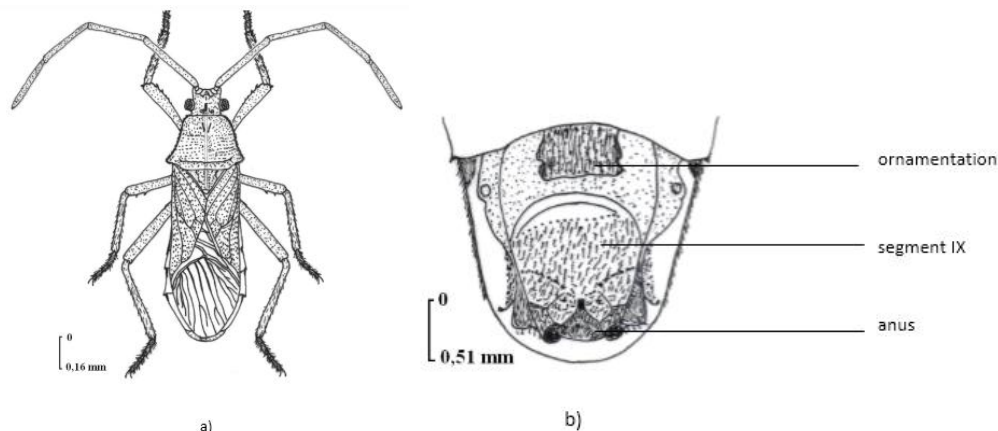


Fig 3: *Latimbus kolleri* (a. dorsal view; b. male abdominal end)

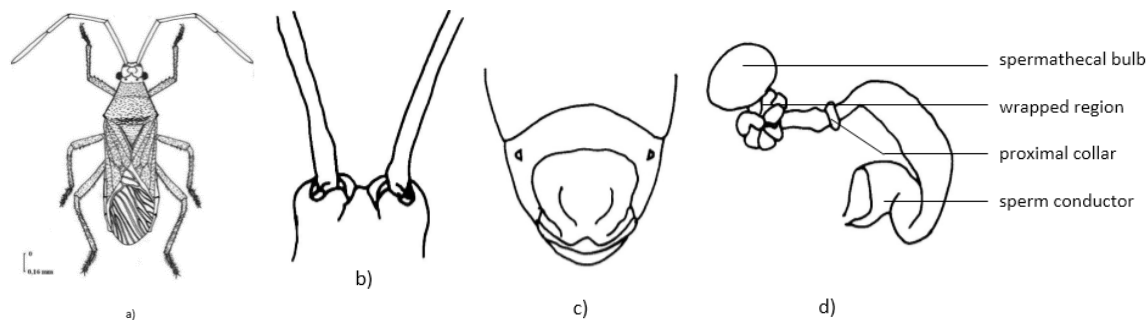


Fig 4: *Latimbus diomandei* sp. Nov. (a. dorsal view; b. antennas insertion; c. abdominal extremity of the male, d. spermathecal)

Abdominal end of the male is rounded and distinct (Figure 4 c). Spermathecal has a bulb, a rolled region spermathecal channel, a proximal neck, a conductive channel sperm and genital chamber (Figure 4d).

Specimens examined in Côte d’Ivoire

Allotype female: Man location 2-X-1977; 11-X-77 collected by Taou Holotype male: Evodoula (Cameroon) III-53 collected by Adam Rageau.

Etymology

This new species was dedicated to the late Professor Diomandé, myrmecologist.

Key of *Latimbus* species

- 1- Presence of a longitudinal black line between the ocelli.... 2
- Absence of a longitudinal center black line between the ocelli 3
- 2- Lateral edges of the concave pronotum carrying small black tubercles; pronotum not crossed longitudinally by a yellowish line.....*L. punctiventris*
- Lateral edges of the pronotum without small black tubercles; pronotum crossed longitudinally by a yellowish line*L. kolleri*
- 3- Head distinctly flattened forward, pronotum with black side and right edges with humeral angles with acute spines*L. diomandei* sp. nov.
- Head not flattened forward, pronotum with black lateral edges nearly straight with humeral angles without sharp spines..... *L. armipes*

4. Discussion

Comparing *Latimbus diomandei* sp. nov. With *L. kolleri* Schouteden indicates that *L. diomandei* sp. nov. Is near to this one by its overall color is yellowish-brown to black dots. The spermathecal of *Latimbus diomandei* is identical to that of *L. armipes*, but larger, the ring before the channel is widened, the back plies of the seminal capsule are black, more numerous than those of *L. armipes*. It differs from *L. armipes* by the mode of insertion of antennas; in *L. diomandei* sp. nov. The antennae are located in a recess of the side lobes (jugas) developed well ahead of antennal tubercles; then by the pronotum is yellow with side edges and black. Its humeral angles are prominent with acute spine in females and subacute in males. Abdominal ends of the male of the two species are different. The ornamentation on the head and the contour of the ocelli are different.

5. Conclusion

In Côte d’Ivoire, there are 4 species of the genus *Latimbus*: *Latimbus armipes* STÅL, 1860 *Latimbus kolleri* Schouteden, 1911; *Latimbus punctiventris* (SIGNORET, 1858) and a new species *Latimbus diomandei* sp. nov.

6. Acknowledgement

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