

**The genus *Xylocoris* found from plant debris in Thailand,
with description of a new species of the subgenus *Arrostelus*
(Hemiptera: Heteroptera: Anthocoridae)**

Kazutaka YAMADA¹⁾, Tomohide YASUNAGA²⁾ and Taksin ARTCHAWAKOM³⁾

¹⁾Tokushima Prefectural Museum, Bunka-no-Mori Park, Mukôterayama, Hachiman-chô, Tokushima, 770-8070 Japan; e-mail: yamada.kaz@gmail.com

²⁾Research Associate, American Museum of Natural History, New York 10024; e-mail: tyasunaga@amnh.org

³⁾Sakaerat Environmental Research Station (SERS), Sakaerat Biosphere Reserve, Thailand Institute of Scientific & Technological Research (TISTR), Ministry of Science and Technology, 1 Moo 9, A. Udom Sab, Wang Nam Khieo, Nakhon Ratchasima, 30370 Thailand; e-mail: sakaerat@tistr.or.th

Abstract. Two species of the minute pirate bug genus *Xylocoris* Dufour, 1931 were found from plant debris on the ground in central Thailand: *Xylocoris* (*Arrostelus*) *ampoli* Yamada & Yasunaga sp. nov., showing wing dimorphism, and *X. (Proxylocoris) cerealis* Yamada & Yasunaga, 2006, previously known only from the rice mill factories. A finding of *X. ampoli* Yamada & Yasunaga sp. nov. represents the second discovery of the subgenus *Arrostelus* Kirkaldy, 1906 in the Oriental Region. Biology and zoogeography of *Arrostelus* are discussed and a key to the species occurring in the Oriental Region is also provided.

Key words. Heteroptera, Anthocoridae, *Xylocoris*, *Arrostelus*, new species, biology, plant debris on the ground, zoogeography, Indonesia, Thailand, Oriental Region

Introduction

The minute pirate bug genus *Xylocoris* Dufour, 1831 contains approximately 50 species, most of them occur in the northern hemisphere (PÉRICART 1996, LATTIN 2000, YAMADA et al. 2006). Nearly 30 species are distributed in the Palaearctic Region (GHAURI 1985, PÉRICART 1996, AUKEMA et al. 2013) and 10 species are known in the Nearctic Region (HENRY 1988, LATTIN 2005). In the Oriental Region, taxonomic studies of *Xylocoris* have been fragmentary thus far, and the fauna is currently represented only by four species in two subgenera: *X. (Arrostelus) flavipes* (Reuter, 1875), *X. (Proxylocoris) clarus* (Distant, 1910), *X. (P.) cerealis* Yamada & Yasunaga, 2006, and *X. (P.) hyalinipennis* Yamada & Yasunaga, 2006 (CARAYON 1972b, YAMADA et al. 2006).

Species of *Xylocoris* are known to occur in various habitats. Most of them are found beneath the tree bark, in leaf litter, and under plant debris. A few of them, *X. (A.) flavipes*, *X. (P.) galactinus* (Fieber, 1836), and *X. (P.) sordidus* (Reuter, 1871), inhabit stored food facilities. In addition to these three species, *X. (P.) cerealis* and *X. (P.) hyalinipennis* were described and documented from rice mills in Thailand (YAMADA et al. 2006). All members feed on various tiny arthropods in such environments (LATTIN 1999, 2000).

During continuing investigations of natural enemies in the agro-ecosystems of Thailand, we collected some minute pirate bugs of the genus *Xylocoris* from plant debris on the ground. Up to now, there was no available account of the occurrence of this genus in such habitat of Thailand. After careful examinations of these specimens, we recognized two species among them: one is an undescribed species of the subgenus *Arrostelus* showing wing dimorphism, and the other is *X. (P.) cerealis* previously known from rice mill factories. The former was also found in the heteropteran collection from Indonesia housed in the National Museum of Nature and Science, Tokyo, during previous investigations by the first author. In this paper, we describe a new species, provide discussion on the biology and zoogeography, and present a key to all known species of the Oriental *Xylocoris*.

Material and methods

Coloration and morphology were observed on dried and card-point-mounted specimens under a binocular microscope (Nikon Stereoscopic Zoom Microscope SMZ1500). For detailed genitalic observation, some specimens were macerated in hot 10% KOH solution until the organs became transparent, and dissected with micro-pins in glycerin. Digital images of live individuals (Figs 1–4) were taken with a Canon EOS Kiss Digital camera body, plus a Canon-Olympus mount adapter, and an Olympus Macrophoto System (Auto Extension Tube with 38 mm or 50 mm macro lens and T10 Ringflash). Photographs (Figs 5–12) were taken using a Hirox digital microscope KH-7700. Scanning electron micrographs (Figs 13–16) were taken with a JEOL JSM-5300. All measurements are given in millimeters. Terminology mainly follows CARAYON (1972b).

Depositories of the types and the other specimens are abbreviated as follows:

| | |
|------|--|
| NSMT | National Museum of Nature and Sciences, Tokyo, Japan; |
| SUT | Suranaree University of Technology, Nakhon Ratchasima, Thailand; |
| TKPM | Tokushima Prefectural Museum, Tokushima, Japan; |
| TYCN | Tomohide Yasunaga collection, Nagasaki, Japan. |

Taxonomy

Genus *Xylocoris* Dufour, 1831

Diagnosis. Readily recognized by the following characters: body oval to elongate oval, shiny on dorsum; pronotum smooth with stout, long corner setae; ostiolar peritreme wide, curved anteriorly in middle, almost or completely reaching anterior margin of metapleura; meso- and metatibiae bearing stout, long spines along predominant part, apically with developed fossula spongiosa; male with a reduced endosoma; female with a peculiar type of conical cell structure in seminal conceptacles.



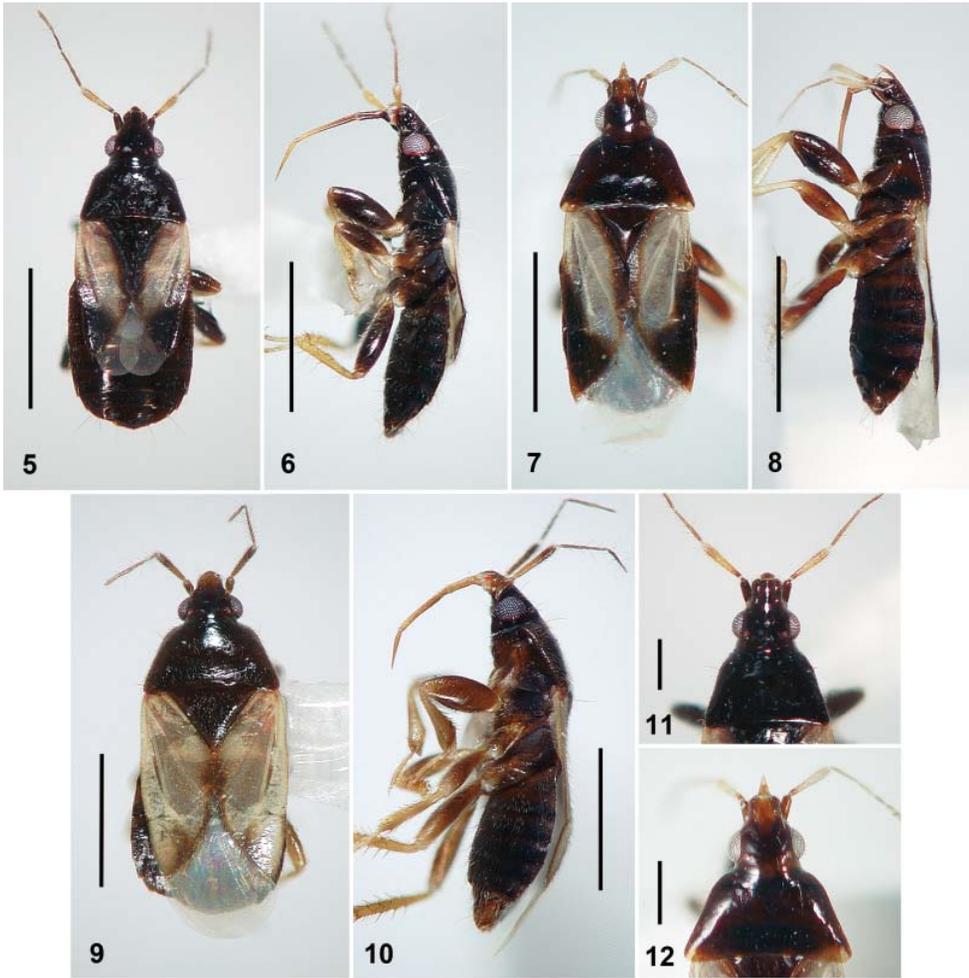
Figs 1–4. Habitus images of *Xylocoris* spp., living individuals (Thailand). 1, 2 – *X. (Arrostelus) ampoli* Yamada & Yasunaga sp. nov., brachypterous form; 3 – ditto, macropterous form; 4 – *X. (Proxycoris) cerealis* Yamada & Yasunaga, 2006.

Remarks. *Xylocoris* is a single genus in the tribe Xylocorini and can be distinguished from other known genera of the family Anthocoridae by the meso- and metatibia generally with stout, long spines, highly developed fossula spongiosa on protibia much larger than those of mesotibia, and wide ostiolar peritreme curved anteriorly in middle and almost or completely reaching anterior margin of metapleuron. In addition, dorsal integumentary copulation on abdomen is unique within the Anthocoridae. Four subgenera, *Arrostelus* Kirkaldy, 1906, *Proxycoris* Carayon, 1972, *Stictosynechia* Reuter, 1884, and *Xylocoris*, are placed in the genus (CARAYON 1972b).

Subgenus *Arrostelus* Kirkaldy, 1906

Diagnosis. Subgenus *Arrostelus* can be distinguished from other subgenera by a combination of the following characters: male tibial teeth always absent (Figs 16, 20); supracoxal area of metapleuron distinct and smooth (Figs 13, 15); copulatory site and cicatrices after copulation present on anterodorsal area of abdomen (CARAYON 1972a,b); and ectospermalege always absent.

Remarks. Four species, *X. flavipes*, *X. congoensis* (Bergroth, 1905), *X. hirsutus* Carayon, 1961, and *X. queenslandicus* Gross, 1954 are now assigned to the subgenus *Arrostelus*



Figs 5–12. *Xylocoris (Arrostelus) ampoli* Yamada & Yasunaga sp. nov. (5–8, 11, 12) and *X. (Proxylcoris) cerealis* Yamada & Yasunaga, 2006 (9, 10). 5, 6 – brachypterous form, male holotype, dorsal (5) and lateral (6) views; 7, 8 – macropterous form, male, dorsal (7) and lateral (8) views; 9, 10 – male, dorsal (9) and lateral (10) views; 11, 12 – head and pronotum, brachypterous (11, female) and macropterous (12, male) forms, dorsal view. Scale bars: 1.0 mm for 5–10; 0.3 mm for 11, 12.

(CARAYON 1972b, CASSIS & GROSS 1995). CARAYON (1972b) suggested that *X. vicarius* (Reuter, 1884) from western Nearctic and Colombia may be accommodated in a new subgenus, closely related to *Arrostelus*. At present, *X. vicarius* is tentatively placed in the subgenus *Xylocoris* (HENRY 1988, CARPINTERO 2002). *Xylocoris ampoli* sp. nov. described below is the second member of *Arrostelus* discovered from the Oriental Region.

Xylocoris (Arrostelus) ampoli Yamada & Yasunaga, sp. nov.

(Figs 1–3, 5–8, 11–27)

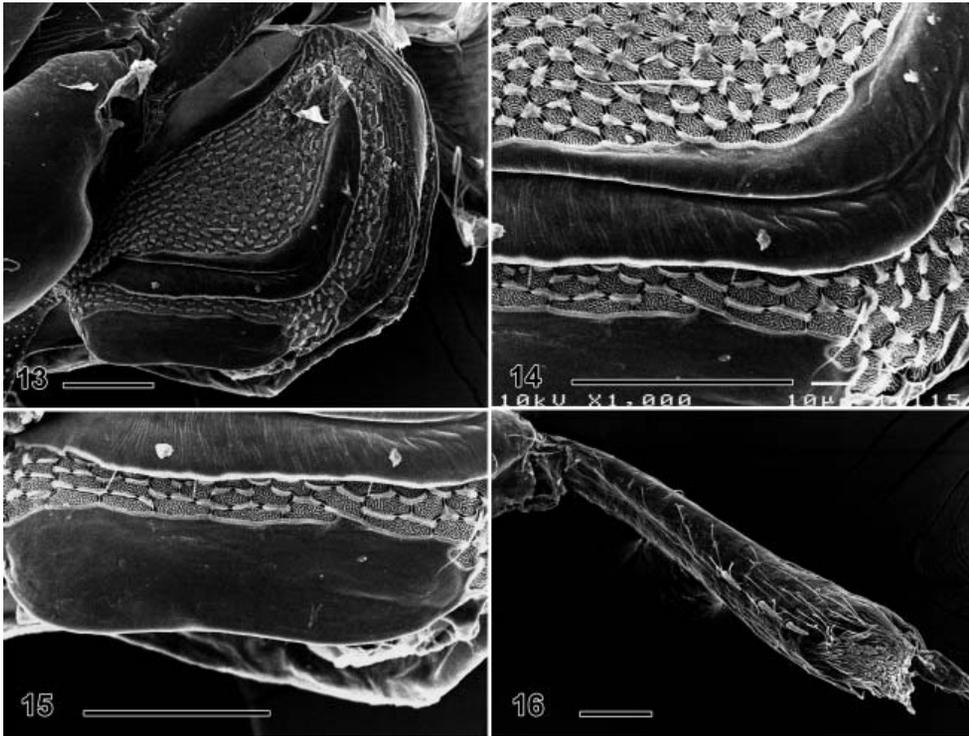
Type locality. Thailand, Suphan Buri Prov., Sri Prachan (14°41'18.3"N, E100°08'25.8"E).

Type materials. HOLOTYPE: ♂ (brachypterous, Figs 5, 6), 'THAILAND: Suphan Buri / Sri Prachan / N14°41'18.3" / E100°08'25.8" / 10 m alt., 25.x.2008 / T. Yasunaga & K. Yamada leg.' (SUT). PARATYPES: **THAILAND:** same label as holotype, 3 ♂♂ (brachypterous, one in Figs 16, 19–27), 7 ♀♀ (5 brachypterous, one in Fig. 11 and other in Figs 13–15; 2 macropterous) (all in TKPM except for 1 ♂ 1 ♀ in TYCN). **INDONESIA:** 4 ♂♂ (NSMT-I-He-66018-66021, macropterous, one in Figs 7, 8, 12, 17), 1 ♀ (NSMT-I-He-66022, macropterous, Fig. 18), E. Kalimantan, Sotek, 5 km W., 29.xii.1980, J. Aoki. (NSMT); 1 ♂ (NSMT-I-He-66023, brachypterous), E. Kalimantan, Sotek, 4 km W., 31.xii.1980, J. Aoki & H. Harada (NSMT).

Description. *Brachypterous form.* Coloration. Body generally fuscous or blackish-brown (Figs 1, 2, 5, 6). Head and pronotum uniformly blackish-brown (Figs 1, 2, 5, 6); eye reddish-brown, area surrounding ocellus reddish-brown. Antennae pale yellow, with segment I and base of segment II darkened (Fig. 5). Labium blackish-brown, with apical half of segment III and whole of IV pale yellow (Fig. 6). Scutellum overall black to blackish-brown (Fig. 5). Clavus widely darkened along inner margin and claval commissure; embolium widely darkened along outer margin; cuneus darkened; endocorium narrowly darkened along corium-membrane boundary; membrane greyish transparent; remaining area of hemelytra whitish stramineous (Figs 5, 18). Trochanters and femora uniformly black to blackish-brown (Fig. 6); tibiae and tarsi pale yellow (Fig. 6). Venter of thorax and abdomen generally black to blackish-brown (Fig. 6).

Structure. Body oblong oval, shiny, covered with stramineous setae (Fig. 5). Head smooth, about 0.8 times as long as width across eyes, sparsely covered with long, erect setae intermixed with short reclining setae (Figs 5, 11), and with a longer erect seta on each side of tylus, anteromesal part of each eye, and between eye and ocellus; anteocular portion as long as length of eye in dorsal view; vertex about four times as wide as eye in dorsal view; postocular portion not constricted; eye oblong, not exceeding levels of both dorsal and ventral surfaces of head in lateral view, sparsely covered with short setae. Antennal segment I stout, just reaching apex of head, sparsely covered with short setae (Figs 5, 11); segment II about 0.7 times as long as width across eyes, slightly thickened toward apex, densely covered with suberect setae which are about as long as width of the segment (Figs 5, 11); segments III and IV narrower than basal width of segment II, covered with long erect setae intermixed with short reclining setae, longest seta on segment III more than three times as long as diameter of the respective segment; segment III about as long as segment II; segment IV flattened and longer than segment III. Labium reaching between mesocoxae, sparsely covered with short suberect setae; segment II with long erect setae near base and apex; segment III about twice as long as segment II (Fig. 6); segment IV about 0.7 times as long as segment III (Fig. 6).

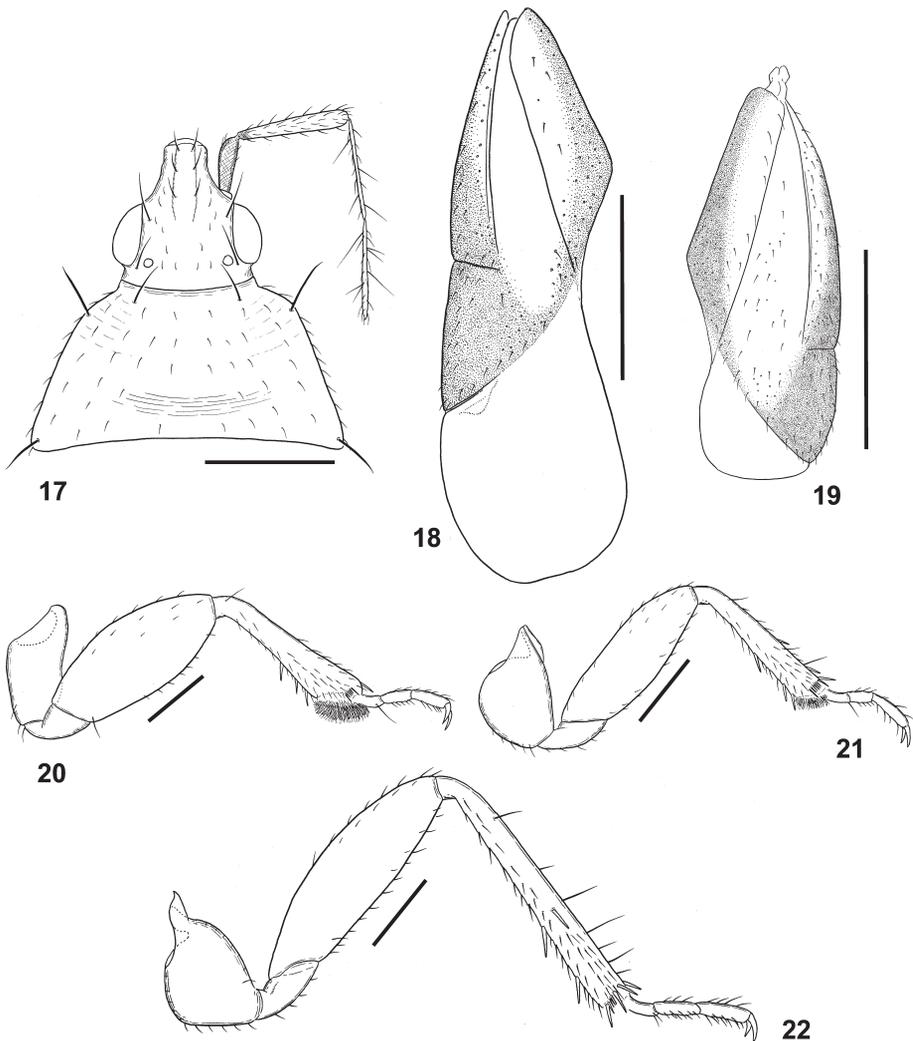
Pronotum shiny, smooth, nearly trapezoidal, with shallow depression posteromedially (Figs 5, 11), sparsely covered with short stramineous reclining setae, and with long, stout erect setae near anterolateral and posterolateral corners and a pair of similar setae behind ocelli (Figs 5, 11); anterior margin slightly concave, its width a little narrower than mesal length (Fig. 11); lateral margin nearly straight, weakly curved in anterior corner, not carinate; posterior margin shallowly concave, its width about twice as wide as anterior pronotal width (Fig. 11); collar indistinct.



Figs 13–16. SEM images of *Xylocoris (Arrostelus) ampoli* Yamada & Yasunaga sp. nov., male (16) and female (13–15). 13 – ostiolar peritreme and evaporatorium, left lateroventral view; 14 – ostiolar peritreme, left lateroventral view; 15 – supracoxal area, left lateroventral view; 16 – protibia, ventral view. Scale bars: 0.05 mm.

Scutellum smooth, nearly equilateral, slightly shorter than basal width, sparsely covered with short reclining setae, and with a pair of very long erect setae near base of lateral side.

Hemelytra reaching at most abdominal tergum V (sometimes anterior part of tergum VI), sparsely covered with short stramineous reclining setae and tiny punctures (Figs 5, 19); costal margin weakly curved (Figs 5, 19); maximum width of endocorium about 1.8 times width of embolium; cuneal margin about 0.4 times as long as embolial margin; membrane with single weak vein a little remote from outer margin. Ostiolar peritreme without canaliculi, curved forward in middle, not reaching anterior margin of metapleuron (Figs 13, 14). Legs densely covered with stramineous reclining setae; protibiae gradually expanded towards apex, bearing three stout spines on apical half of ventral side, with a well-developed fossula spongiosa at apex (Figs 16, 20); meso- and metatibiae bearing several stout spines on apical half, the spines a little shorter than width of respective tibia (Figs 21, 22); mesotibiae apically with fossula spongiosa smaller than that of protibia (Fig. 21); metatibiae covered with long erect setae on outer side, the longest seta about as long as width of the tibia (Fig. 22). Abdomen beneath covered with stramineous suberect setae, bearing long, stout setae on lateral margin of segments VII and VIII in male; scissure on abdominal tergite reaching near posterior margin of segment III.



Figs 17–22. *Xylocoris (Arrostelus) ampoli* Yamada & Yasunaga sp. nov., male (17, 19–22) and female (18). 17 – head and pronotum, macropterous form, dorsal view; 18 – hemelytron, macropterous form, dorsal view; 19 – ditto, brachypterous form, dorsal view; 20 – right fore leg, outer view; 21 – right middle leg, outer view; 22 – right hind leg, outer view. Scale bars: 0.5 mm for 18, 19; 0.3 mm for 17; 0.2 mm for 20–22.

Male genitalia (Figs 23–27). Pygophore shortened, much wider than long, strongly produced laterally on left side, densely covered with short suberect setae on posterodorsal surface, and with several long, stout setae along outer margin (Figs 23, 24); paramere sickle-shaped, arising from left side of posteroventral part of pygophore, with wide groove entirely visible from posterolateral aspect (Figs 24–27); apex of paramere just reaching the tip of laterally produced left side of pygophore (Figs 23, 24).

Female genitalia. Abdominal segment VII to IX laterally covered with long, stout setae; ovipositor well developed.

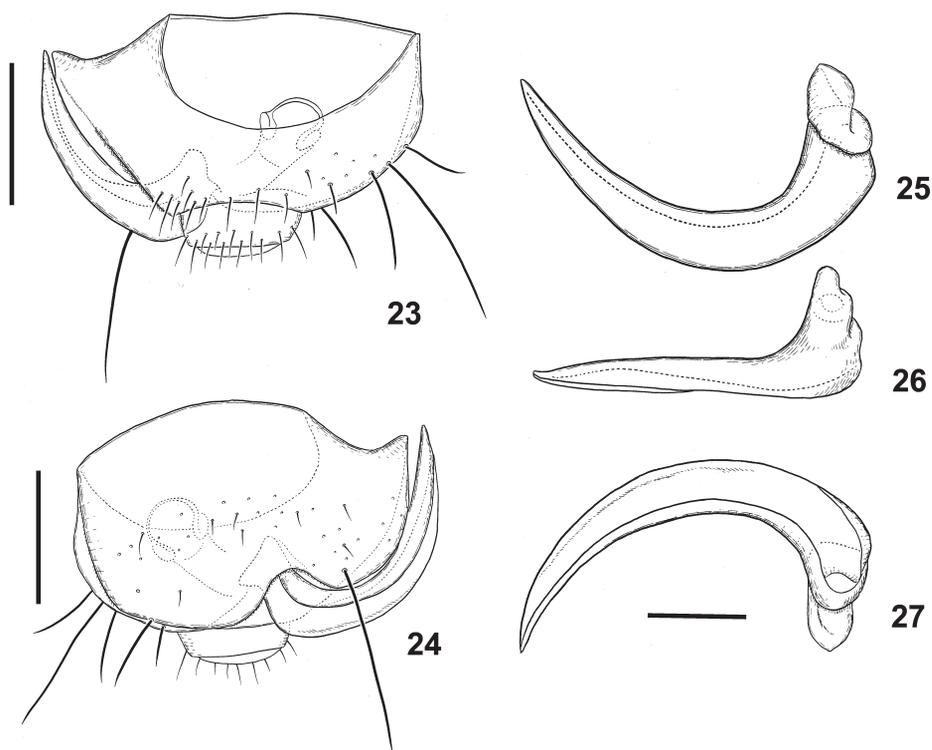
Measurements (brachypterous form) (σ , n = 5 / ρ , n = 5), value for holotype male in parentheses). Body length 1.90–2.30 (2.10) / 2.05–3.00; head length (excluding neck) 0.30–0.33 (0.30) / 0.33–0.34; head width across eyes 0.37–0.40 (0.39) / 0.38–0.40; vertex width 0.24–0.25 (0.25) / 0.24–0.27; width between ocelli 0.17–0.19 (0.18) / 0.18–0.20; lengths of antennal segments I–IV: I – 0.13–0.14 (0.13) / 0.13–0.14, II – 0.25–0.29 (0.25) / 0.26–0.29, III – 0.26–0.29 (0.26) / 0.26–0.29, IV – 0.28–0.31 (0.30) / 0.30–0.31; lengths of labial segments II–IV: II – 0.19–0.21 (0.20) / 0.21–0.23, III – 0.38–0.44 (0.40) / 0.43–0.45, IV – 0.29–0.30 (0.29) / 0.30–0.31; anterior pronotal width 0.33–0.34 (0.34) / 0.33–0.36; mesal pronotal length 0.35–0.39 (0.38) / 0.35–0.40; basal pronotal width 0.65–0.75 (0.69) / 0.69–0.71; length of embolial margin 0.54–0.69 (0.55) / 0.58–0.65; length of cuneal margin 0.29–0.33 (0.30) / 0.29–0.33; maximum width across hemelytra 0.71–0.77 (0.74) / 0.71–0.80.

Macropterous form. Coloration. General coloration same as brachypterous form, but slightly lighter (Figs 3, 7, 8, 12).

Structure. Almost the same as brachypterous form. Pronotum relatively wider than that of brachypterous form (Figs 12, 17); anterior pronotal width narrower than mesal length; basal pronotal width about 2.3 times as wide as anterior pronotal width (Figs 12, 17). Hemelytra much exceeding apex of abdomen in Indonesian specimens (Figs 7, 8), but reaching at most abdominal tergum VIII and remarkably narrowed toward apex in Thai specimens; costal margin nearly straight (Figs 7, 18); maximum width of endocorium about twice width of embolium (Figs 7, 18); cuneal margin about 0.6 times as long as embolial margin (Figs 7, 18).

Measurements (macropterous form) (σ , n = 4) / (ρ , n = 3)). Body length 2.25–2.55 / 2.55–2.75; head length (excluding neck) 0.31–0.38 / 0.33–0.35; head width across eyes 0.40–0.41 / 0.39–0.44; vertex width 0.25–0.26 / 0.25–0.28; width between ocelli 0.19–0.20 / 0.19–0.20; lengths of antennal segments I–IV: I – 0.13–0.14 / 0.13–0.14, II – 0.29–0.30 / 0.29–0.31, III – 0.28–0.28 / 0.28–0.29, IV – 0.29–0.31 / 0.33–0.34; lengths of labial segments II–IV: II – 0.20–0.23 / 0.20–0.23, III – 0.44–0.44 / 0.46–0.48, IV – 0.29–0.30 / 0.29–0.33; anterior pronotal width 0.34–0.35 / 0.34–0.36; mesal pronotal length 0.38–0.40 / 0.38–0.41; basal pronotal width 0.78–0.84 / 0.74–0.91; length of embolial margin 0.68–0.71 / 0.66–0.78; length of cuneal margin 0.41–0.48 / 0.35–0.45; maximum width across hemelytra 0.80–0.83 / 0.81–0.83.

Differential diagnosis. The new species differs markedly from all other members of *Arrostellus* in its conspicuous color pattern of hemelytra (Figs 1–3, 5, 7, 18, 19) and structure of male genitalia (Figs 23–27). Judging from the descriptions and illustrations by GROSS (1954) and CARAYON (1961, 1972b), the paramere of the new species differs from those exhibited by other species of *Arrostellus* in its apex just reaching the tip of laterally produced left side of pygophore (Figs 23, 24) (in others much exceeding the tip of laterally produced left side of pygophore). *Xylocoris ampoli* sp. nov. is also similar in general appearances to *X. vicarius*, from which it is separable by the clavus being widely darkened along its inner margin and the claval commissure (Figs 5, 7, 18, 19) (in *X. vicarius* wholly darkened except for whitish median part along outer margin) and endocorium being narrowly darkened along corium-membrane boundary (Figs 5, 7, 18, 19) (in *X. vicarius* not darkened along corium-membrane boundary).



Figs 23–27. *Xylocoris (Arrostelus) ampoli* Yamada & Yasunaga sp. nov. 23, 24 – pygophore with paramere, dorsal (23) and ventral (24) views; 25–27 – paramere, three different aspects. Scale bars: 0.1 mm for 23, 24; 0.05 mm for 25–27.

In addition, the shape of ostiolar peritreme and the copulation site on female abdomen of *X. vicarius* are quite different from the members of *Arrostelus* (CARAYON 1972b).

Etymology. The new species is named after Assoc. Prof. P. Ampol (Rajamangala University of Technology, Suvarnabhumi, Ayutthaya, Thailand) who greatly supported our field researches in Sphan Buri Province of Thailand.

Distribution. Thailand (Suphan Buri Province), Indonesia (Eastern Kalimantan).

Remarks. *Xylocoris ampoli* sp. nov. has a wing dimorphism (Figs 1–3, 5, 7, 18, 19). The wing dimorphism found in the genus *Xylocoris* appears to be frequent, especially in the subgenus *Arrostelus*. Known species of *Arrostelus*, except for *X. queenslandicus*, show remarkable wing dimorphism. The hemelytra of the brachypterous form of this new species are almost reaching abdominal tergum V (Fig. 5). On the other hand, the macropterous form is considered to include two types: (1) the hemelytra of the Indonesian specimens are much exceeding the apex of abdomen (Fig. 7); (2) in Thai specimens, the hemelytron reaches abdominal tergum VIII and is remarkably narrowed toward apex. In this paper, we tentatively treat these two types as a single macropterous form because the number of available specimens is currently insufficient to provide an unequivocal definition of the wing variation.

Subgenus *Proxylocoris* Carayon, 1972

Diagnosis. Easily distinguished from other subgenera by a combination of the following characters: male pro- and mesotibiae with tibial teeth always present, row of tibial teeth on middle leg longer than that of fore leg; canaliculi on surface of ostiolar peritreme distinct and densely distributed; ectospermalege always present on right side of anterodorsal area of abdomen (usually between abdominal tergite II and III).

Remarks. *Proxylocoris* is the second largest group in this genus and comprises about 20 described species. Most of them are distributed in central and eastern Palaearctic Region (PÉRICART 1996), whereas only three species occur in the Oriental Region (YAMADA et al. 2006).

Xylocoris (Proxylocoris) cerealis Yamada & Yasunaga, 2006

(Figs 4, 9, 10)

Xylocoris (Proxylocoris) cerealis Yamada & Yasunaga, 2006: 526.

Specimens examined. THAILAND: 1 ♂ (Figs 9, 10), Suphan Buri, Sri Prachan, N14°41'18.3", E100°08'25.8", 10 m alt., 25.x.2008, K. Yamada lgt. (TKPM); 1 ♂ 1 ♀, Nakhon Nayok, Sarika, N14°17'20.8", E101°17'20.5", 25 m alt., 22.–23.iii.2010, at light, K. Yamada lgt. (TKPM); 1 ♀, Nakhon Ratchasima, Sakaerat Environmental Research Station, N14°29'24.4"–30'37.5", E101°54'37.8"–55'49.7", 372–601 m alt., 23.–25.i.2009, light trap, T. Yasunaga & K. Yamada lgt. (TKPM); 1 ♀, same locality, N14°30'26.9", E101°55'39.2", 407 m alt., light trap, 11.–14.vi.2009, K. Yamada lgt. (TKPM); 1 ♀, Chiang Mai, Mae Rim, Mae Sa, 400–450 m alt., 1.–4.viii.2001, S. Nagashima lgt. (TKPM).

Diagnosis. Recognized by the following characters: head and thorax blackish-brown (Figs 4, 9, 10); hemelytra semi-transparent with darkened area along claval commissure and corium-membrane boundary, and with dark sub-triangular spot on apico-mesial corium (Figs 4, 9); ostiolar peritreme not reaching anterior margin of metapleuron; femora brown to blackish-brown, with apex yellowish-brown (Fig. 10); tibiae and tarsi uniformly pale yellow (Fig. 10); paramere medially angulate in posterior view; ectospermalege much smaller, extending posteriorly, and weakly sclerotized.

Distribution. Thailand.

Remarks. This species have hitherto been known only from southern Thailand (Songkhla and Nakhon Si Thammarat Provinces) (YAMADA et al. 2006). However, we also found it in central (Suphan Buri, Nakhon Nayok, and Nakhon Ratchasima Provinces) and northern (Chiang Mai Province) territories of Thailand (this paper).

Discussion

Biology. In the course of our investigations of natural enemies in agro-ecosystems of Thailand, two species of *Xylocoris* were captured from plant debris on the ground in Suphan Buri Province, central territory of Thailand. The collecting site is located in a rural area surrounded by rice paddy fields, cultivated fields and grasslands, where plant debris is usually abundant. Such plant debris on the ground is composed of various dead plants such as mowed grasses, cut straws, leaves of evergreen broadleaved trees (including planted fruit trees), and withered leaves of some vegetables. Such environments may provide preferable microhabitats for anthocorids with a wide variety of arthropods. Two *Xylocoris* species were obtained by beating and shifting the piles of plant debris, together with two additional species of the

Anthocoridae – *Almeida pilosa* (Poppius, 1909) and *Lippomanus* sp. Since the springtails, small lepidopteran larvae, and other various tiny arthropods commonly co-occur in such habitats, they are considered prey of these anthocorids.

Xylocoris cerealis, previously known only from rice mill factories, was recognized under natural conditions for the first time. The present discovery suggests that the dominant species of *Xylocoris* in stored food facilities such as *X. flavipes* may originally occur in similar plant debris on the ground or in leaf litter.

Zoogeography. The species of *Arrostelus* (except for *X. queenslandicus* from Queensland, Australia) have been confirmed primarily in the Ethiopian Region. However, *X. flavipes* is not restricted to a certain region and is widespread mainly in the Old World tropics and subtropics (e.g., CARAYON 1961, CASSIS & GROSS 1995, PÉRICART 1996). The true natural distribution of *X. flavipes* is quite difficult to trace because this anthocorid appears to have been introduced to many regions worldwide by commerce. It is assumed to be non-indigenous in the Oriental Region, judging from the previous records (e.g., VISARATHANONTH et al. 1994, CASSIS & GROSS 1995, PÉRICART 1996, YAMADA et al. 2006). *Xylocoris ampoli* sp. nov. is apparently native to Thailand and Kalimantan (Indonesia), based on field observations, and considerably expands the known native range of the subgenus, reported from the Ethiopian and Australian Regions thus far.

Key to species of *Xylocoris* occurring in the Oriental Region

The present key is modified from those provided by YAMADA et al. (2006: 532).

1. Male tibial teeth always absent; ostiolar peritreme smooth, lacking canaliculi; ectospermalege absent. Wing dimorphism present. (Subgen. *Arrostelus*) 2
 - Male tibial teeth always present on fore and middle legs; ostiolar peritreme densely covered with canaliculi; ectospermalege always present on right side of anterodorsal area of abdomen. Wing dimorphism absent. (Subgen. *Proxylocoris*) 3
2. Clavus, endocorium, and embolium yellowish-brown; all femora uniformly pale yellow. *X. (A.) flavipes* (Reuter, 1875)
 - Clavus widely darkened along inner margin and claval commissure; endocorium narrowly darkened along corium-membrane boundary; embolium widely darkened along outer margin; all femora uniformly black to blackish-brown. *X. (A.) ampoli* Yamada & Yasunaga **sp. nov.**
3. Corium darkened along corium-membrane boundary, and with dark sub-triangular spot at apico-mesial corium; ectospermalege much smaller, extending posteriorly. *X. (P.) cerealis* Yamada & Yasunaga, 2006
 - Corium narrowly darkened along corium-membrane boundary, without dark subtriangular spot; ectospermalege large, broadened anteriorly. 4
4. Body larger (about 3.0 mm long); apex of paramere extending well beyond the tip of laterally produced left side of pygophore; ectospermalege vague, conical. *X. (P.) clarus* (Distant, 1910)
 - Body smaller (about 2.3 mm long); apex of paramere extending near the tip of laterally produced left side of pygophore; ectospermalege with a complexly folded thin duct on right lateral margin. *X. (P.) hyalinipennis* Yamada & Yasunaga, 2006

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