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The assassin bug subfamily Harpactorinae (Hemiptera: Reduviidae) from Vietnam: an annotated checklist of species

TRUONG XUAN LAM^{1,5}, WANZHI CAI², MASA AKI TOMOKUNI³ & TADASHI ISHIKAWA⁴

¹*Institute of Ecology & Biological Resources, Vietnam Academy of Science and Technology, No. 18 Hoang Quoc Viet, Cau Giay, Ha Noi, Vietnam. E-mail: txlam_iebr@yahoo.com*

²*Department of Entomology, China Agricultural University, Yuanmingyuan West Road, Beijing 100094, China. E-mail: caiwz@cau.edu.cn*

³*National Museum of Nature and Science, 4-1-1 Amakubo, Tsukuba-shi, Ibaraki, 305-0005 Japan. E-mail: tomokuni@kahaku.go.jp*

⁴*Laboratory of Entomology, Faculty of Agriculture, Tokyo University of Agriculture, Atsugi, Kanagawa, Japan. E-mail: chuishikawa@gmail.com*

⁵*Corresponding author*

Abstract

A checklist of all known Vietnamese species of the assassin bug subfamily Harpactorinae (Hemiptera: Heteroptera: Reduviidae) is presented with distributional and taxonomic notes. Sixty-five species in 35 genera of the subfamily are recognized in Vietnam. Eleven genera and 32 species are reported herein for the first time from this country. Newly recorded genera are *Henricohahnia* Breddin, 1900, *Kalonotocoris* Miller, 1941, *Lingnania* China, 1940, *Lopodytes* Stål, 1853, *Macracanthopsis* Reuter, 1881, *Sclomina* Stål, 1861, *Serendiba* Distant, 1906, *Serendus* Hsiao, 1979, *Vesbius* Stål, 1866, *Villanovanus* Distant, 1904, and *Yolinus* Amyot & Serville, 1843. New record species are *Biasticus confusus* Hsiao, 1979, *B. flavinotus* (Matsumura, 1913), *Cosmolestes annulipes* Distant, 1879, *C. pulcher* Hsiao, 1979, *Cydnocoris fasciatus* Reuter, 1881, *C. gilvus* (Burmeister, 1838), *Endochus nigricornis* Stål, 1859, *Henricohahnia vittata* Miller, 1954, *Isyndus heros* (Fabricius, 1803), *I. pilosipes* Reuter, 1881, *Kalonotocoris curvipes* Miller, 1941, *Lingnania braconiformis* China, 1940, *Lopodytes spectabilis* Miller, 1941, *Macracanthopsis nodipes* Reuter, 1881, *Sclomina erinacea* Stål, 1861, *Serendiba nigrospina* Hsiao, 1979, *S. staliana* (Horváth, 1879), *Serendus geniculatus* Hsiao, 1979, *Sphedanolestes annulipes* Distant, 1903, *S. gularis* Hsiao, 1979, *S. impressicollis* (Stål, 1861), *S. pubinotus* Reuter, 1881, *S. trichrous* Stål, 1874, *S. xiongii* Cai & Cai, 2004, *Sycanus croceus* Hsiao, 1979, *Velinus annulatus* Distant, 1879, *V. malayus* (Stål, 1863), *V. rufiventris* Hsiao, 1979, *Vesbius purpureus* (Thunberg, 1784), *V. sanguinosus* Stål, 1874, *Villanovanus nigrorufus* Hsiao, 1979, and *Yolinus albopustulatus* China, 1940. All the species are examined with Vietnamese materials except for *Agriosphodrus dohrni* (Signoret, 1862), *Cydnocoris russatus* Stål, 1867, and *Sycanus atrocoeruleus* Signoret, 1862.

Key words: Reduviidae, Harpactorinae, Vietnam, new records, checklist

Introduction

The subfamily Harpactorinae is the largest and the most diverse subfamily of the heteropteran family Reduviidae. More than 300 genera and 2000 species have been known in the world (Putshkov & Putshkov 1985; Maldonado-Capriles 1990). Some of them can be found on agricultural crops such as rice, soybean, and cotton playing an important role of natural enemies in controlling insect pests of these crops (Ambrose 1999).

Vietnam lies between tropical and temperate zones and consequently maintains rich entomodiversity. However, the fauna of the Vietnamese Harpactorinae has been poorly studied. Only about 33 valid species in 24 genera of this subfamily have been reported from the country prior to this study (Signoret 1862; Stål 1863, 1874; Breddin 1903; Distant 1903a, b, 1904, 1919; Miller 1954; Hsiao & Ren 1981; Cai & Wang 1998; Ishikawa 2002; Truong 2002; Tomokuni & Cai 2002, 2004; Ishikawa & Okajima 2004; Truong *et al.* 2005, 2006a, b; Zhao *et al.* 2014). Therefore, as the first step of comprehensive inventory research we here provide a species checklist of the subfamily in Vietnam with new information of taxonomy and distribution obtained through the examination of available specimens housed in several institutions mentioned afterwards.

Discussion

Our list enumerates 65 species in 35 genera as the subfamily Harpactorinae from Vietnam including newly recorded 11 genera and 32 species. As totalized in Fig. 1, of these genera *Sphedanolestes* is the largest containing six species. Four genera, i.e. *Epidaurus*, *Isyndus*, *Sycanus*, and *Velinus*, are the second largest after *Sphedanolestes* consisting of four species each. Four genera, i.e. *Biasticus*, *Cydnocoris*, *Endochus*, and *Rhynocoris*, comprises three species each, and others only one or two (Fig. 1). These number clearly shows that the faunal research of the subfamily in Vietnam still insufficient. It can easily be inferred from the geographical and environmental conditions in Vietnam as a whole that much more harpactorine species should inhabit there.

Some harpactorines, such as *Coranus fuscipennis*, *Coranus spiniscutis*, *Sycanus croceovittatus*, and *Sycanus falleni*, play an important role in controlling pest insects of agricultural crops in Vietnam (Nguyen *et al.* 2011, 2012; Truong & Pham 2011). However, the biology of most Vietnamese harpactorine reduviids still remains unknown. The diversity and bionomics of assassin bugs in Vietnam need further studies.

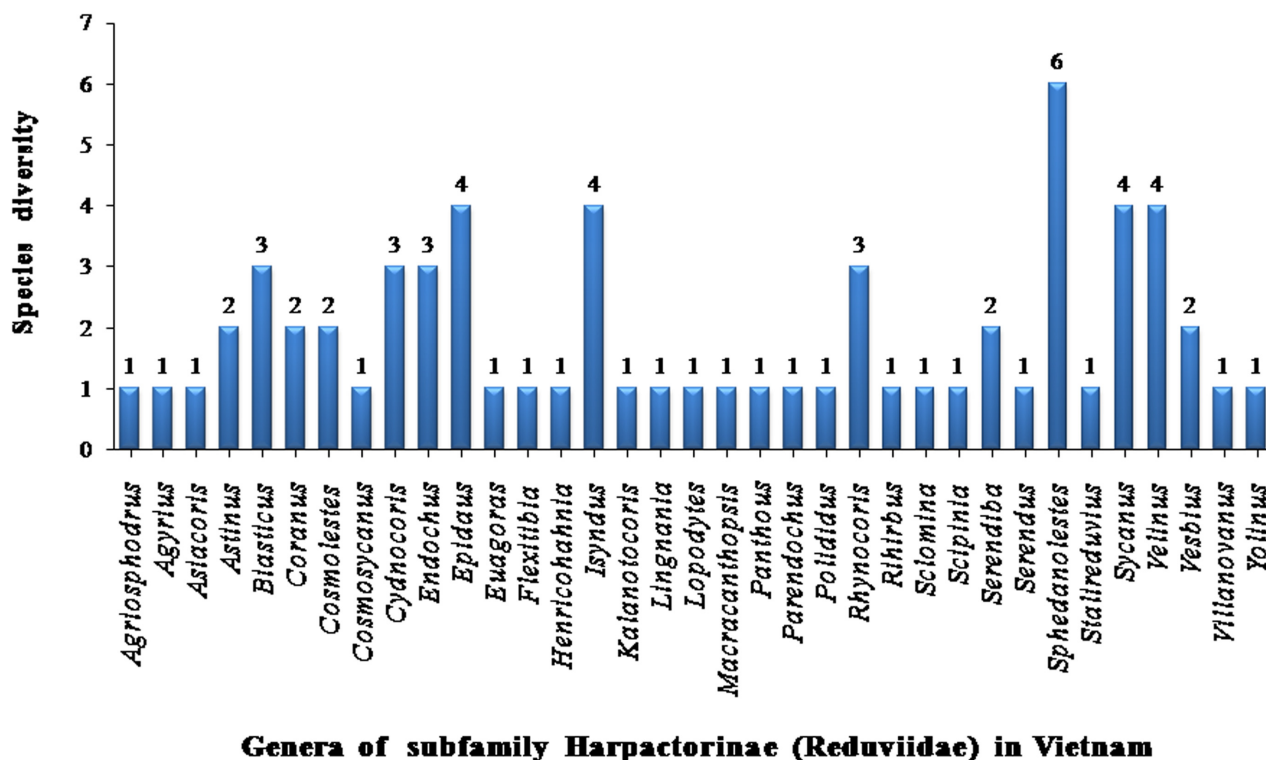


FIGURE 1. Species diversity of Vietnamese Harpactorinae.

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