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**The genus *Megalestes* Selys, 1862 in Vietnam, with first description
of female of *Megalestes australis* Karube, 2014
(Odonata: Zygoptera: Synlestidae)**

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Abstract

The male secondary genitalia and the caudal appendages of males and females of the three confirmed Vietnamese *Megalestes* species (*M. australis*, *M. havi* and *M. micans*) are figured. The female sex of *M. australis* is described for the first time.

Key words: Odonata, Synlestidae, *Megalestes*, *M. australis*, first female, Vietnam.

Introduction

In the literature four species of the genus *Megalestes* Selys, 1862 have been reported from Vietnam, namely *M. australis* Karube, 2014, *M. distans* Needham, 1930, *M. havi* Wilson & Reels, 2003 and *M. micans* Needham, 1930 (Asahina 1997, Do & Dang 2007, Karube 2014). In the original description of *M. micans* from Sichuan and *M. distans* from Sichuan and Guangxi, Needham (1930) provided only one figure of the appendages of each species. Later, Asahina (1969, 1985) provided detailed figures of appendages, genital ligula and prothoracic structures of *M. distans* and *M. micans*, respectively. Wilson & Reels (2003) in reporting the odonates from Guangxi included diagnostic structures of *M. distans* and described *M. havi*. All these reports are based on Chinese specimens. Asahina (1997) recorded both *M. micans* and *M. distans* from northern Vietnam but included only two figures of the prothoracic dorsum for males of both each species. Further stating that *M. micans* differs from *M. distans* by having a small spot at the centre of the occiput, dorsal yellowish pattern on the prothorax, and without a spine on the acrotergite (Asahina 1997: Figures 15–16, p. 112). Do & Dang (2007), repeated by Karube (2014), doubted the identification of *M. distans* in Vietnam and advised further study of Asahina's specimens. In this paper, we provide photographs and illustrations of male and female of *M. australis*, *M. havi* and *M. micans* from Vietnam including update distribution map and notes on their morphological variation. The female of *M. australis* is described for the first time.

Systematic

Megalestes australis Karube, 2014

(Figures 7–9, 14–15, 16–18, 25–27)

Specimens examined. 1♀, Ch'Om commune, Tay Giang district, Quang Nam Prov., 24.XI.2016, Q.T. Phan leg.; 2♂♂, same date, location and collector; 1♂, Tr'Hy commune, Tay Giang district, Quang Nam Prov., 15.VI.2012, Q.T. Phan leg.; 1♂, same location and collector, 18.V.2017; 1♂, same location and collector, 20.VII.2017; 2♂♂, Po Mu forest, Tay Giang district, Quang Nam Prov., 12.X.2017; Pham Anh Tuan leg.; 2♂♂, Bach Ma National Park, Thua Thien Hue Prov., 27.VI.2017, Q.T. Phan leg.; 2♂♂, Ngoc Linh Nature Reserve, Kon Tum Prov., 05.III.2017, Nguyen Dang Van leg.

Karube (2014) described *M. australis* from Bach Ma National Park, central Vietnam based on a single male specimen. Here we describe the female for the first time and provide notes on the morphological variation of the male.

First description of the female

Head (Figures 16–18). Labrum, postclypeus, ante- and postfrons metallic greenish; labium dull yellow; anteclypeus black; mandible yellow basally, apical margin black. Antennae entirely black. Dorsum of head metallic green except for two small spots adjacent to lateral ocelli. Post of head matt black with a small oval yellow spot at mid-dorsally.

Thorax (Figures 16, 23). Anterior and posterior lobes of prothorax largely yellow stained with brown laterally; middle lobe mostly black with notopleural sutures dark yellow. Propleuron yellow with a large brown spot. Synthorax metallic green with yellow stripes as in male: mesepisternum, mesepimeron and metepisternum predominantly metallic-green, but invaded by yellow stripe not quite reaching posterior margin and green maculation extending to small wedge-shaped marking on upper posterior margin of metepimeron; metepimeron otherwise entirely yellowish.

Legs (Figure 16). Coxae and trochanters entirely yellow; femora, tibia, tarsi and claws black excluding dark yellow extensor surfaces of femora.

Wings hyaline, black venation with dark yellow cells. Postnodal cross-veins 18 in fore wing and 14–15 in the hind wing. Pterostigma brown, surmounting three cells.

Abdomen. Dorsal surface of S1–5 metallic green becoming black on S6–10; ventral margin of tergum yellow from S1–10. Cerci entirely black. Ovipositor (Figure 27) black, yellow dorsally extending about to level of S10.

Measurements (mm). Abdomen (incl. appendages) 49; hindwing 36.

Differential diagnosis of the females. Females of the three Vietnamese *Megalestes* are superficially similar in colouration and body size (Figures 19–27). In Sa Pa (or Hoang Lien National Park), both *M. havi* and *M. micans* occurred on the same stream but we were able to catch these species in tandem to ensure the correct female identity for each species. Female of *M. havi* can be easily separated from *M. micans* and *M. australis* by the long and acuminate spine on the acrotergite (red arrow) (Figure 23) whereas this structure is short and blunt in *M. micans* (Figure 20) and *M. australis* (Figure 26).

Body colouration and structure of female *M. australis* resemble that in *M. micans* but differs in possessing a yellow marking on the dorsum of middle lobe prothorax (Figure 26) instead of mostly dark green in *M. micans* (Figure 20). Moreover, both species are allopatric in Vietnam with *M. micans* thus far known only in Sa Pa of northern Vietnam while *M. australis* is known from central portion of the country (Figure 28).

Notes on the morphological variation of the male. In our material the male of *M. australis* shows little variation of body coloration: anterior lobe of prothorax and S10 are very dark in two males from Tay Giang, not yellowish as depicted in Figure 25 or in specimens from the type locality (Bach Ma).

Megalestes havi Wilson & Reels, 2003

(Figures 4–6, 12–13, 22–24)

Specimens examined. 4♂♂1♀, Hoang Lien National Park, Lao Cai Prov., 24.X.2016, Q.T. Phan leg.; 2♂♂, same location and collector, 22.V.2014; 1♂, Pia Oac Nature Reserve, Cao Bang Prov., 16.V.2015, Q.T. Phan leg.; 1♂, Tam Dao National Park, Vinh Phuc Prov., 24.VI.2004, Do Manh Cuong leg.

Notes. Asahina (1997) figured his specimens of Vietnamese "*M. distans*" with an acute spiny process exists on the acrotergite (Asahina 1997: Figure 16). This structure is similar to those present in *M. havi* (Figure 22) based on specimens in our collection. Moreover, several authors (Do & Dang 2007; Karube 2014; Phan & To in this study) found only *M. havi* at the same localities (Tam Dao and Hoang Lien) listed by Asahina (1997). Based on our recently collected material, we conclude that the material identified as *M. distans* by Asahina (1997) is in error and instead represents *M. havi*. We have seen no bona fide material of *M. distans* from Vietnam and we consider its listing from Vietnam to be erroneous.

Megalestes micans Needham, 1930

(Figures 1–3, 10–11, 19–21)

Specimens examined. 7♂♂, Hoang Lien National Park, Lao Cai Prov., 22.V.2014, Q.T. Phan leg.; 8♂♂1♀, same location and collector, 24.X.2016.

Notes. Our specimens of *M. micans* presented have the peculiar small yellow patch on the prothoracic dorsum as indicated by Asahina (1997: Figure 15, p. 112) although two of our males have a largely black middle lobe (Figure 19). Thoracic coloration should be used with caution as a means for identifying species of *Megalestes*. Male *M. micans* readily differs from all other Vietnamese *Megalestes* by the narrow slender tip of the cercus (Figure 1); obtusely pointed paraproct and lacking a lateral projection (Figure 3) while in *M. havi* and *M. australis*, the tip of the cercus is thick and robust, and the paraprocts is more acuminate and possesses a basal lateral projection (Figures 6, 9).

Acknowledgements

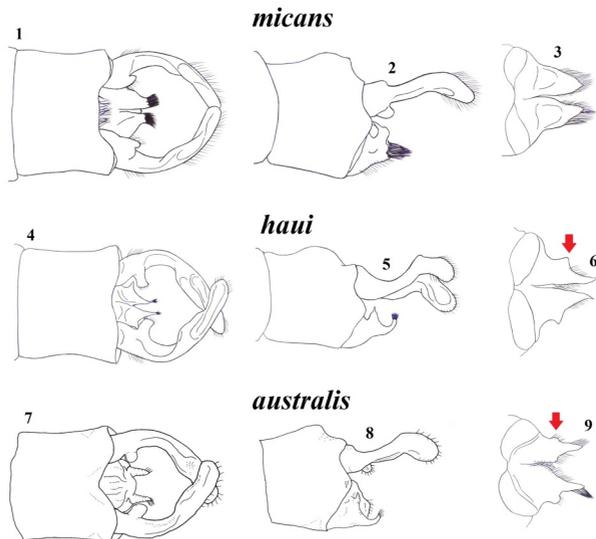
We are thankful to Dr. Rosser Garrison and Mr. Keith DP Wilson for revising, reviewing and improving the manuscript; Dr. Matti Hämäläinen for providing us many valuable comments; Mr. Do Manh Cuong, Nguyen Dang Van and Pham Anh Tuan for supplying

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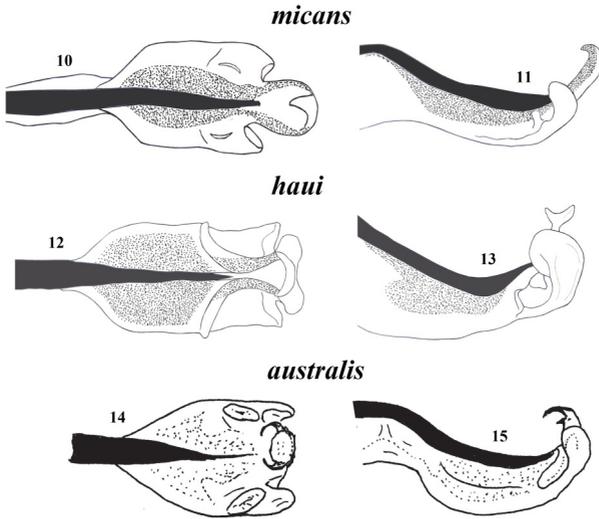
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Appendix: Figures



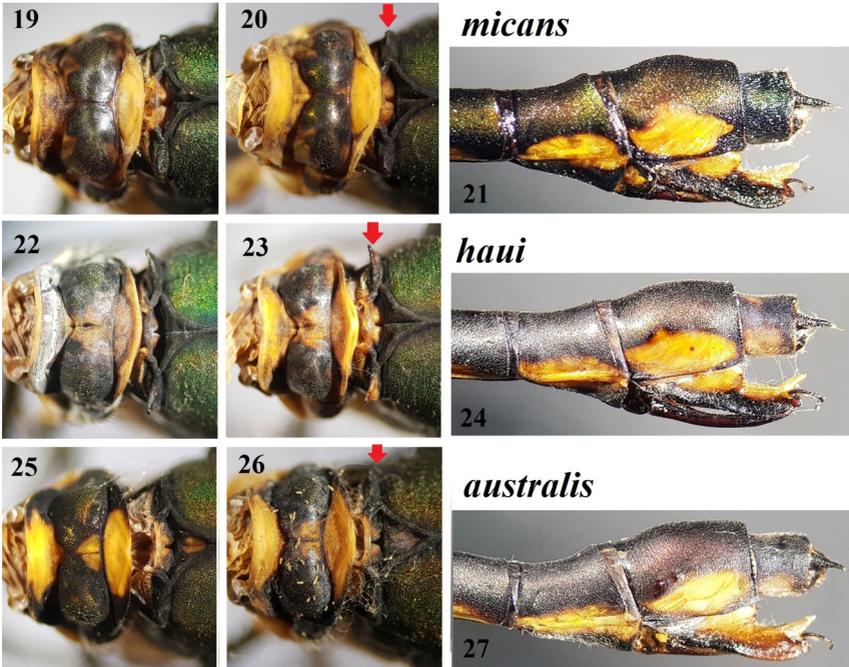
Figures 1–9. Cerci and paraproct of *Megalestes* spp. in dorsal, lateral and ventral view. [1–3] *M. micans*; [4–6] *M. hui*; [7–9] *M. australis* (Figures 7–8 from Karube 2014).



Figures 10–15. Genital ligula of *Megalestes* spp. in dorsal and lateral view. [10–11] *M. micans*; [12–13] *M. havi*; [14–15] *M. australis* (from Karube 2014).



Figures 16–18. *Megalestes australis*, female from Ch'Om, Tay Giang. (16), habitus female, scale bar is 1 cm; (17), head in dorso-oblique view; (18) head in dorsal view.



Figures 19–27. *Megalestes* spp., prothorax and tip of abdomen. [19–21] *M. micans*; [22–24] *M. havi*; [25–27] *M. australis*.



Figure 28. Provincial distribution map of Vietnamese *Megalestes* species. (●) *M. micans*; (●) *M. havi*; (●) *M. australis*.

Odonata checklist from Son Tra Nature Reserve, Da Nang city, central Vietnam

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Abstract

A checklist of 44 odonate species (21 Zygoptera and 23 Anisoptera) from Son Tra Nature Reserve, central Vietnam is provided. *Idionyx thailandica* Hämäläinen, 1985 is recorded for the Vietnamese fauna for the first time, a new *Coelliccia* sp. is awaiting description in the near future, and the taxonomic status of specimens of the genus *Leptogomphus* remains unsettled and will have to be solved in the future.

Key words: Odonata, checklist, Son Tra Nature Reserve, Vietnam.

Introduction

Son Tra Nature Reserve (Fig. 1, 2) ("Son Tra Peninsula"), situated only 13 km from the center of Da Nang city, was established in 1977 to protect an area of 4,370 hectares of forest that covers most of the peninsula (Ulibarri 2013). The reserve is well-established as a destination for tourists from abroad and for naturalists from the city because of its primordial jungle with a vast diversity of plants and animals. The Son Tra peninsula is famous for the Red-Shanked Doucs (*Pygathrix nemaeus* (Linnaeus, 1771)), an endangered primate species. This beautiful creature, often dubbed "the Queen of primates" for their colorful body, was used in the logo of APEC Vietnam 2017 (the Asia-Pacific Economic Cooperation 2017 meeting in Da Nang, Vietnam) (Fig. 3). They usually appear near the collecting sites S1–4 (see below). Son Tra Nature Reserve is also home to at least 14 amphibian, 41 reptile, 127 bird, 46 mammal, 1022 plant, and 142 insect species (Ulibarri 2013). Among these, only four odonate species have been recorded: *Acia grion* sp., *Agriocnemis* sp., *Brachythemis* sp. and *Nannophya pygmaea* (Rambur, 1842) (Dinh Thi Phuong Anh 1997). Based on the results of several field surveys in eight sampling sites (S1–8 as below), we provide a checklist of 44 species (21 zygopteran and 23 anisopteran species) from Son Tra, including the first published record of *Idionyx thailandica* Hämäläinen, 1985 for the Vietnamese fauna, and a new species of *Coelliccia* to be described in the near future.

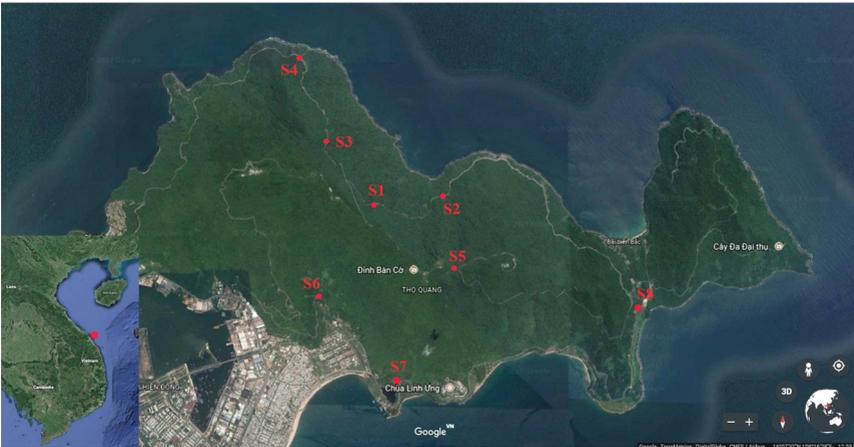


Figure 1. Map of collecting sites in Son Tra Nature Reserve (arranged from Google Maps: <https://maps.google.com/>)

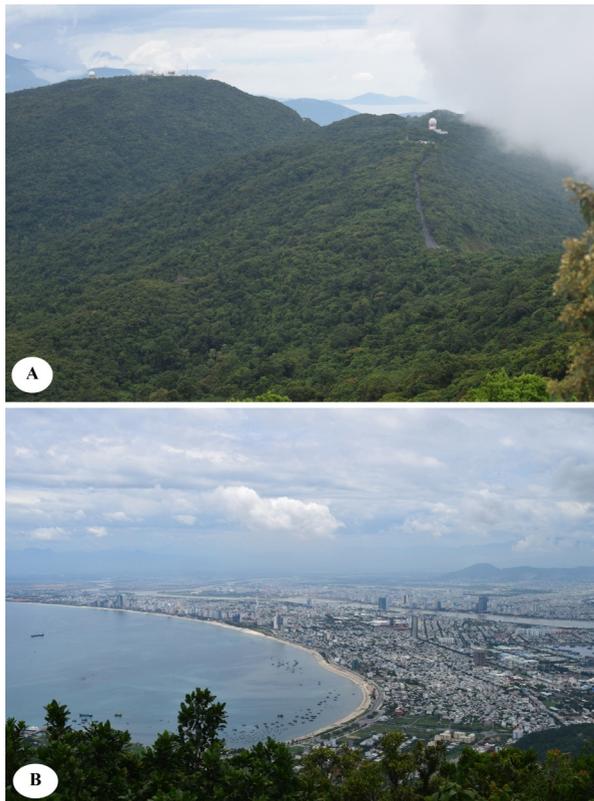


Figure 2. View from Ban Co peak. (A), main road inside the nature reserve; (B), Da Nang city.



Figure 3. Red-Shanked Doucs (*Pygathrix nemaeus* (Linnaeus, 1771), photographed by Mr. Dang Ngoc Sam Thuong, 2 Feb. 2016 in Son Tra Nature Reserve and the logo of APEC Vietnam 2017.

Material and Methods

Systematic classification of Odonata follows Dijkstra et al. (2013, 2014) except for the genus *Macromidia*, which is, following Karube (2015), placed in the family Gomphomacromiidae. Collecting and preparing odonate specimens follows Paulson (2018). A digital camera Nikon D3300 with lens kit 18–55mm VR was used to photograph the habitats and a lens Tamron AF 70–300mm F4–5.6 to photograph specimens in nature. Illustrations were processed using Adobe Photoshop 7.0 software.

All specimens are preserved in the private collections of the authors.

Sites surveyed

A map demonstrates the eight sample sites (S = site) (Fig. 1). S1–6 are rocky streams with the water surface usually covered with dense vegetation. Some very short streams (S2, S3, S5) are so-called intermittent streams, which are dry in the hot season (from June to August). S7 is a lake near the Linh Ung pagoda and S8 is a swamp near



Figure 4. Field work in Son Tra Nature Reserve. (A) QTP tried to collect the female *Chlorogomphus* sp. in S1; (B), habitat of S2; (C), habitat of S6; (D), habitat of S8.

the InterContinental beach resort. The authors' names are abbreviated as QTP and VQT. Coordinates and elevation (a.s.l. = above sea level) of each site are as follows:

- S1 - Ho Sau 1: 16°07'799"N, 108°15'789"E, 355 m a.s.l. (Fig. 4A)
- S2 - Ho Sau 2: 16°07'891"N, 108°16'549"E, 70 m a.s.l. (Fig. 4B)
- S3 - Cong 19: 16°07'686"N, 108°14'670"E, 381 m a.s.l.
- S4 - Suoi Da: 16°06'932"N, 108°15'249"E, 62 m a.s.l.
- S5 - Cau Cay Xanh: 16°06'933"N, 108°15'247"E, 69 m a.s.l.
- S6 - Suoi Om: 16°08'980"N, 108°14'528"E, 37 m a.s.l. (Fig. 4C)
- S7 - Lake near Linh Ung Pagoda: 16°10'067"N, 108°27'536"E, 60 m a.s.l.
- S8 - Swamp near InterContinental resort: 16°11'414"N, 108°30'994"E, 98 m a.s.l. (Fig. 4D)

Results

ZYGOPTERA

Devadattidae

Devadatta cyanocephala Hämäläinen, Sasamoto & Karube, 2006

2♂♂, S2, 14.iv.2017, QTP leg.; 2♂♂, S5, 08.vi.2017, QTP leg.; 7♂♂, S2, 23.iv.2017, VQT leg.

Calopterygidae

Neurobasis chinensis (Linnaeus, 1758)

2♂♂, S4, 14.iv.2017, QTP leg.

Vestalis gracilis (Rambur, 1842)

1♂, S6, 14.iv.2017, QTP leg.; 1♂1♀, S6, 08.vi.2017, QTP leg.; 1♂2♀♀, S8, 21.iv.2017, VQT leg.; 1♂1♀, 23.iv.2017, S3, VQT leg.

Chlorocyphidae

Aristocypha fenestrella (Rambur, 1842)

2♂♂1♀, S2, 14.iv.2017, QTP leg.

Euphaeidae

Euphaea guerini Rambur, 1842

Specimens collected are listed in Phan et al. (2018). Location S2, 4, 6.

Euphaea masoni Selys, 1879

Specimens collected are listed in Phan et al. (2018). Location S4.

Coenagrionidae

Aciagrion borneense Ris, 1911

2♂♂, S5, 20.x.2016, VQT leg.

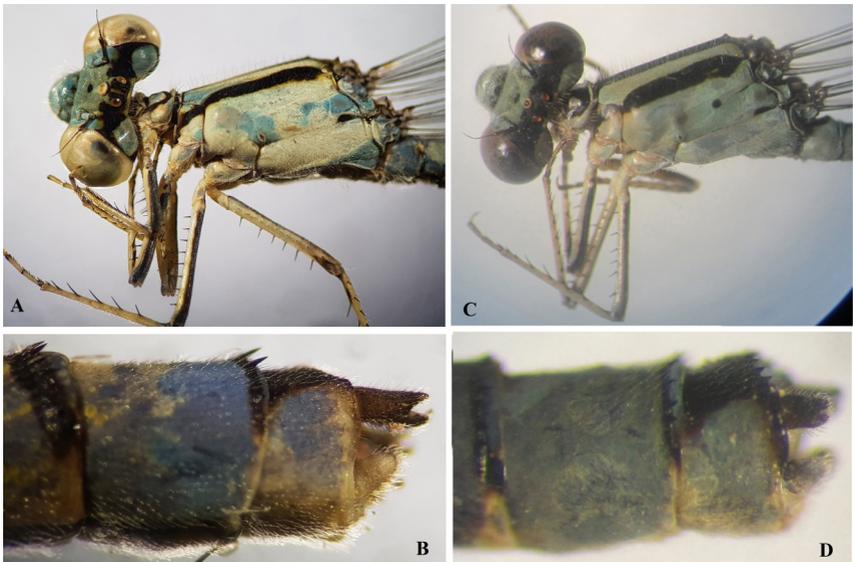


Figure 5. *Pseudagrion* spp. ♂. [A-B] *P. microcephalum* & [C-D] *P. australasiae*, Vu Quang National Park, Ha Tinh Prov. (7.IX.2015, QTP leg.). (A, C), head and thorax, lateral view; (B, D), abdominal tip and anal appendages, lateral view.

Agriocnemis femina (Brauer, 1868)

3♂♂, S4, 14.iv.2017, QTP leg.

Agriocnemis pygmaea (Rambur, 1842)

3♂♂2♀♀, S4, 21.vii.2017, QTP leg.

Ceriagrion auranticum Fraser, 1922

2♂♂, S4, 21.vii.2017, QTP leg.; 1♂, S8, 23.iv.2017, VQT leg.

Ischnura senegalensis (Rambur, 1842)

2♂♂, S4, 21.viii.2017, QTP leg.; 1♂1♀, S3, 23.iv.2017, VQT leg.

Pseudagrion microcephalum (Rambur, 1842) (Figure 5)

3♂♂, S4, 21.viii.2017, QTP leg.

P. microcephalum looks very much like its congener *P. australasiae* Selys, 1876 (Fig. 5A, C), but has longer cerci (Fig. 5B, D).

Pseudagrion pruinatum (Burmeister, 1839)

1♂, 21.viii.2017, S4.

Pseudagrion rubriceps Selys, 1876

1♂1♀, S4, 21.viii.2017, QTP leg.; 3♂♂1♀, S8, 23.iv.2017, VQT leg.

Platycnemididae

Coeliccia scutellum Laidlaw, 1932

2♂♂3♀♀, S1, 14.v.2017, QTP leg.; 4♂♂3♀♀, S5, 08.vi.2017, QTP leg.

Coeliccia sp. nov. (Figure 6)

7♂♂3♀♀, S1, 14.iv.2017, QTP leg.; 1♂, S1, 21.viii.2017, QTP leg.; 1♀, S1, 23.iv.2017, VQT leg.

This new species is to be described shortly (Tom Kompier pers. comm.).



Figure 6. *Coeliccia* sp. ♂ in nature (photograph by QTP, 14.v.2017).

Copera marginipes (Rambur, 1842)

4♂♂, S4, 21.vii.2017, QTP leg.

Prodiasineura autumnalis (Fraser, 1922)

Specimens collected are listed in Phan et al. (2017). Location S6.

Prodasineura croconota (Ris, 1916)

Specimens collected by the first author are listed in Phan et al. (2017). Location S6; 5♂♂3♀♀, S8, 21.iv.2017, VQT leg.

Platystictidae

Protosticta grandis (Asahina, 1985)

1♀, S1, 14.iv.2017, QTP leg.

Protosticta caroli Van Tol, 2008

2♂♂, S1, 08.vi.2017, QTP leg.

ANISOPTERA

Aeshnidae

Anax parthenope julius Brauer, 1865

1♂, S8, 19.x.2016, VQT leg.

Chlorogomphidae

Chlorogomphus sp. (Figure 7)

We observed one male and one female of an unknown *Chlorogomphus* species at S1. The female of this species was characterized by dark-reddish and yellowish marking of the wings (Fig. 7). This character is similar to the female of *C. aritai* Karube, 2013 (known from the type locality at Bach Ma National Park, appr. 50km NW of S1) and to *C. caloptera* Karube, 2013 (known from Da Lat and Bao Loc in



Figure 7. *Chlorogomphus* sp. ♀ hanging from a high branch of a tree (photograph by QTP, 14.v.2017).

Lam Dong Province in SW Vietnam) (Karube 2013). Unfortunately, we could not collect any specimens of *Chlorogomphus* sp. in Son Tra, because they either flew too quickly or perched inaccessibly on high branches of trees. The status of this species, therefore, cannot be solved until specimens of it can be collected.

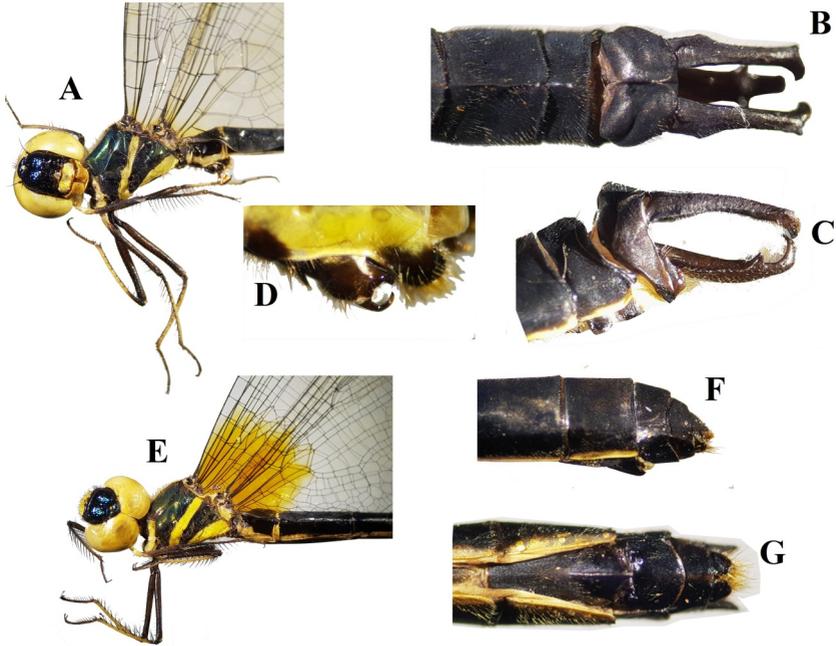


Figure 8. *Idionyx thailandica*, [A-D] ♂ & [E-G] ♀. (A), head and thorax; (B), anal appendages, dorsal view; (C), anal appendages, lateral view; (D), accessory genitalia; (E), head and thorax, lateral view; (F), abdomen tip, lateral view; (G), abdomen tip, ventral view.

Corduliidae

Idionyx thailandica Hämäläinen, 1985 (Figure 8)

10♂♂6♀♀, S1,3,6, 08.vi.2017, QTP leg.; 1♂1♀, S1, 14.v.2017, QTP leg.; 2♂♂, S7, 21.iv.2017, VQT leg.

This is a new record for the Vietnamese fauna. Prior to this study, three species of the genus *Idionyx* had been listed from Vietnam, including *I. asahinai* Karube, 2011, *I. carinata* Fraser, 1926, and *I. victor* Hämäläinen, 1991 (Karube 2011). However, we question the taxonomic status of *I. thailandica* and *I. victor*. Hämäläinen (1991) stated that, in *I. thailandica*, the lateral expansion of S7–9 is distinctly wider than that in *I. victor*, and that the lateral spines of the paraprocts are pointed straight laterally. We are not convinced of the validity of these differences between *I. victor* and *I. thailandica*, because the angle of the spines on the paraprocts ap-

pendages is a somewhat variable character and the width of S7–9 may vary upon drying of specimens. Karube (2011) also recorded *I. victor* from southern Vietnam based on the character of the lateral spines on paraprocts, but we found no evidence in the many specimens from all over Vietnam (including material from the Bao Loc = the location of Karube's "*I. victor*") that conclusively could be identified as *I. victor* rather than *I. thailandica* (Phan pers. database; Tom Kompier pers. comm.). The species in Son Tra fits *I. thailandica*, but in fact all Vietnamese *I. thailandica* and the type of *I. victor* require further comparison, including DNA analysis, to clarify their taxonomic relationship.

Gomphidae

Ictinogomphus pertinax (Hagen in Selys, 1854)

1♀, S6, 14.v.2017, QTP leg.

Ictinogomphus decoratus (Selys, 1854)

1♂, S5, 23.iv.2017, VQT leg. It also can be seen in S8.

Heliogomphus chaoi Karube, 2004 (Figure 9)

1♂, S2, 08.vi.2017, QTP leg.

The structure of the male from Son Tra (Fig. 9A-E) fits the original description of *H. chaoi* from southern Vietnam well (Karube 2004), except for the robust lobe on

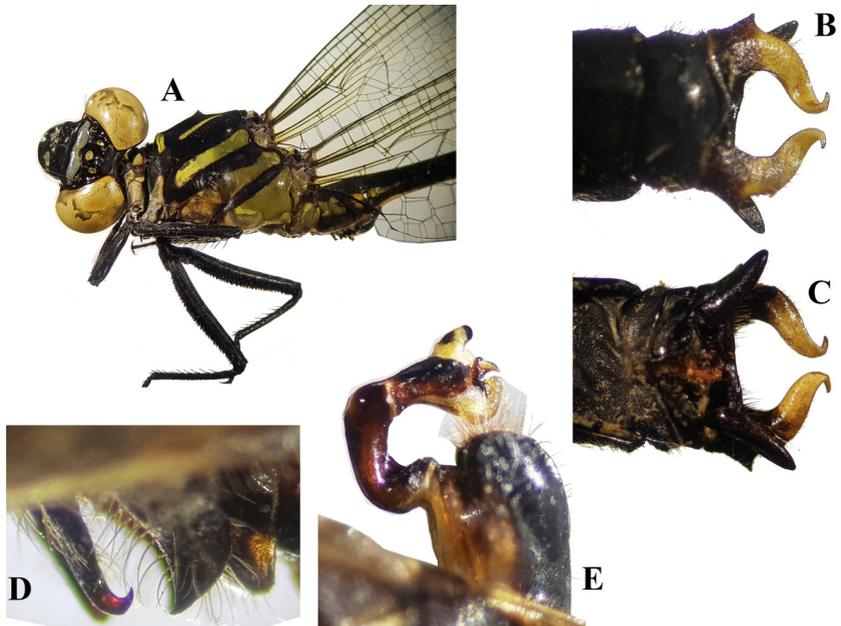


Figure 9. *Heliogomphus chaoi* ♂. (A), head and thorax, lateral view; (B), anal appendages, dorsal view; (C), anal appendages, ventral view; (D), accessory genitalia; (E), vesica spermalis.

the dorsal side of the apical segment of the vesica spermalis (Fig. 9E). However, Tom Kompier alerted us to the fact that in dried state the lobe may not be recognizable. The figure of the vesica spermalis of *H. chaoi* in the original description (Fig. 10 in Karube 2004) fails to show the lobe. His own specimens of *H. chaoi* from the type locality (Bao Loc of Lam Dong Province) in dried state also did not seem to have the lobes, but upon wetting the specimens, lobes as in Fig. 9E became obvious (Tom Kompier, pers. comm.).

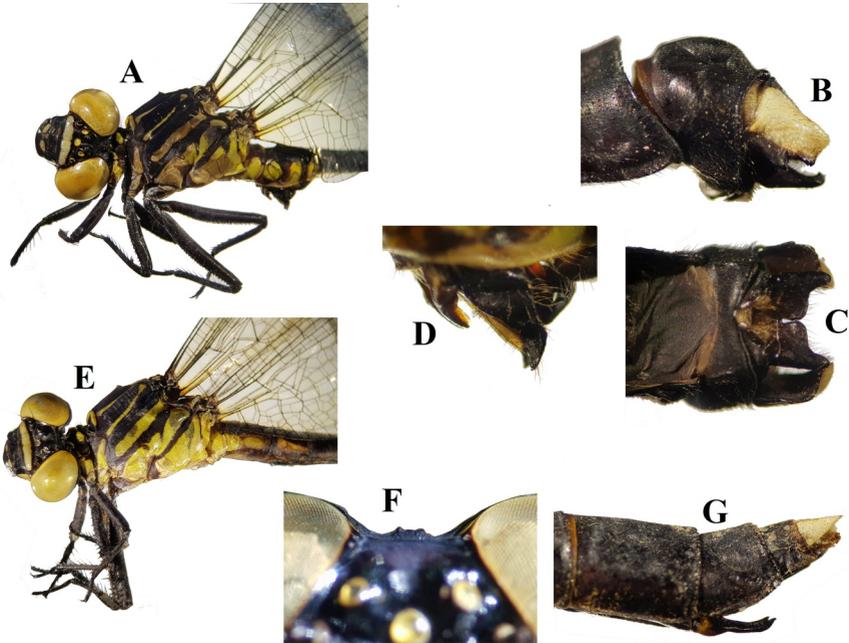


Figure 10. *Leptogomphus* sp. [A-D] ♂ & [E-G] ♀. (A), head and thorax, lateral view; (B), anal appendages, lateral view; (C), anal appendages, ventral view; (D), accessory genitalia; (E), head and thorax, lateral view; (F), occiput, dorsal view; (G), abdomen tip, lateral view.

Leptogomphus sp.

(Figure 10)

9♂♂1♀, S1-3,5-6, 08.vi.2017, QTP leg.; 2♂♂1♀, S2, 21.viii.2017, QTP leg.; 1♂, S6, 21.iv.2017, VQT leg.

The male of *Leptogomphus* sp. from Son Tra is similar to *L. inouei* Karube, 2014 and *L. baolocensis* Karube, 2001 with respect of the paraprocts which are broadly bilobed with prolonged outer apex, and each lobe with inner circular projections that are nearly touching (Fig. 10C). However, the occiput of the female *Leptogomphus* sp. in Son Tra possesses two middle-central small projections (Fig. 10F),

while those of *L. inouei* are separated on each side of the occiput (Fig. 8j, p. 74 in Karube 2014) or replaced by two vertical horns in *L. baolocensis* (Fig. 33, p. 277 in Karube 2001). We could not conclusively settle the taxonomic status of the *Leptogomphus* sp. in Son Tra, since the difference in morphology to these two species is minimal and may be within the variability of either species. A molecular study of these taxa could solve this problem in the future.

Megalogomphus sommeri (Selys, 1854)

1♂, S2, 14.iv.2017, QTP leg.

Gomphomacromiidae

Macromidia genialis shanensis (Fraser, 1927) (Figure 11)

1♂, S6, 14.iv.2017, QTP leg.; 1♂, S6, 08.vi.2017, QTP leg.

In Vietnam, only three species of the genus *Macromidia* have been recorded: *M. rapida* Martin, 1907, *M. genialis shanensis* (Fraser, 1927) and *M. kelloggi* Asahina, 1978 (Do & Dang 2007; Karube 2011, 2015). *M. g. shanensis* can be easily distinguished from the two other Vietnamese *Macromidia* species by the entirely black appendages (Fig. 11B-C), which are extensive marked yellowish-white in *kelloggi* and *rapida*.



Figure 11. *Macromidia genialis shanensis* ♂. (A), head and thorax, lateral view; (B), anal appendages, lateral view; (C), anal appendages, dorsal view; (D), abdomen tip, ventral view; (E), accessory genitalia;

Libellulidae

Brachythemis contaminata (Fabricius, 1793)

3♂♂, S6, 14.v.2017, QTP leg.

Diplacodes trivialis (Rambur, 1842)

1♂, S2, 14.v.2017, QTP leg.; 1♂, S5, 23.iv.2017, VQT leg.

Nannophya pygmaea (Rambur, 1842)

This species was recorded by Dinh Thi Phuong Anh (1997). Presently, no material from Son Tra is available to the authors.

Orthetrum chrysis (Selys, 1891)

2♂♂, S6, 14.v.2017, QTP leg.

Orthetrum glaucum (Brauer, 1865)

3♂♂, S4, 21.viii.2017, QTP leg.; 1♀, S7, 21.iv.2017, VQT leg.

Orthetrum sabina (Drury, 1770)

This is a widespread species and can be found in all sampled locations.

Orthetrum triangulare (Selys, 1878)

5♂♂, S1,3,5, 14.v.2017, QTP leg.

Pantala flavescens (Fabricius, 1798)

This is a widespread species and can be found in all localities (S1–8).

Rhyothemis variegata (Linnaeus, 1763)

2♂♂, S4, 21.viii.2017, QTP leg.; 1♂, S7, 21.iv.2017, VQT leg.

Tholymis tillarga (Fabricius, 1798)

1♂, S3, 21.viii.2017, QTP leg.; 1♂, S8, 23.iv.2017, VQT leg.

Tramea virginia (Rambur, 1842)

1♂, S4, 21.viii.2017, QTP leg. This species was also observed at many places along the main road in the peninsula.

Trithemis aurora (Burmeister, 1839)

2♂♂1♀, S4, 21.viii.2017, QTP leg.

Trithemis festiva Rambur, 1842

1♂, S5, 20.x.2016, VQT leg.

Zygonyx iris Selys, 1869

2♂♂1♀, S2, 08.vi.2017, QTP leg.; 1♂2♀♀, S6, 23.iv.2017, VQT leg.

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