

List of Pselaphine Species (Insecta, Coleoptera, Staphylinidae) Collected by Light Traps from North Vietnam in 2014 with Supplements and Corrections to the Check-list of Nomura (2013)

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Abstract A list of pselaphine species collected by light traps from Ba Be National Park, Bac Kan Province and Tay Yen Tu Natural Sanctuary, Bac Giang Province, North Vietnam is present. Collecting data of thirty pselaphine species including six new records from N Vietnam are listed. Twelve species of Batrisitae, ten of Goniaceritae, seven of Pselaphitae and one of Clavigeritae are recorded. Fourteen additional species known from Vietnam are appended to the list of Nomura (2013). As the result, 111 pselaphine species have been known from Vietnam.

Key words: Pselaphinae, Staphylinidae, fauna, Vietnam, new record.

Introduction

According to the check-list of pselaphine species recorded from Vietnam (Nomura, 2013), 97 species in 66 genera have been known. The authors conducted a survey in Ba Be National Park, and in Tay Yen Tu Natural Sanctuary, North Vietnam in July 2014. It was a part of field survey of the project of KAKENHI by the Tokyo University of Agriculture, Atsugi, Japan. As the result, thirty pselaphine species were collected by light traps. It includes six new records of pselaphine species from Vietnam as follows: *Cratna cicatricosa* Raffray, *C. abdominalis* Löbl, *Arthromelodes reichenbachi* (Motschulsky), *Batraxis raffrayana* (Blattný), *Sublipalpis myrmecophilus* (Raffray), and *Mastiger brevicornis* Raffray. The list and the table are present below. Fourteen species containing six new records shown above, seven overlooked species and a recently added species, are supplemented to the check-list by Nomura (2013) by the appendix of

this paper. After the present paper, 111 pselaphine species have been recorded from Vietnam.

Materials and Methods

The collecting survey was conducted from 1st to 13th July 2014 at two points of North Vietnam, Ba Be National Park, Bac Kan Province (Fig. 2A, C) and in Tay Yen Tu Natural Sanctuary, Bac Giang Province (Fig. 1, 2D, F). The pselaphine beetles were collected by the following two types of light traps. 1) Some portable light traps each with a fluorescent tube 4W in the system of Dr. Yuta Nakase (=NLT) were used for collecting pselaphines by Nomura (Fig. 2B, E). This type of trap is already explained in Nomura *et al.* (2013). They were fixed by wire on tree, lighted on in evening and they were collected in the next morning. All NLTs were set on the position of 1 m above the ground. The species collected by the NLT, together with details of the conditions (where these pselaphine beetles were

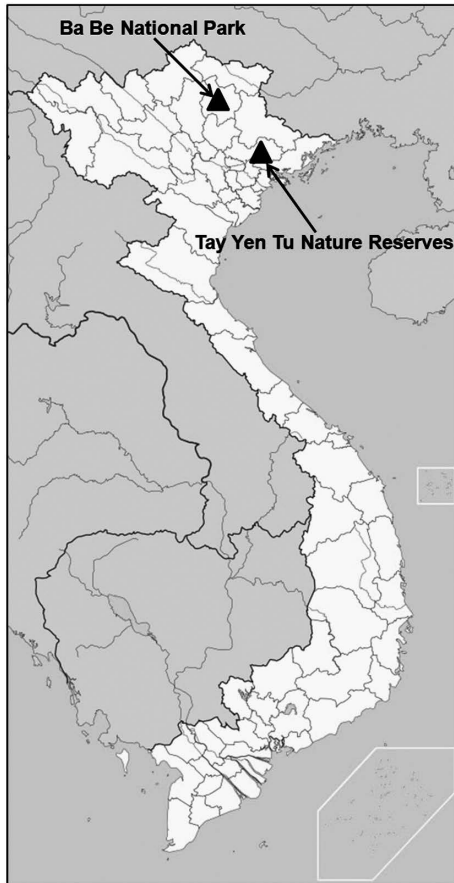


Fig. 1. A map of surveyed points at N Vietnam in 2014.

collected) are shown in Table 1. 2) The large type of light trap (= LT) was settled sometimes using mercury lamps, generator and large white sheets. Dr. Yoshitomi, Dr. Mita, Mr. Ito and the first author collected some pselaphines by this method.

For the SEM photos, all specimens were air dried, uncoated, and illustrated with an SEM fit with a digital microscope system (KEYENCE VHX-2000 + VHX-D510) under AV 0.9–2.0 kv. Collected specimens are tentatively preserved in collection of the department of Zoology, National Museum of Nature and Science (NMNS), Tsukuba, Japan.

The List of Pselaphine Species Collected by Light Traps from North Vietnam in 2014

The pselaphine species which were not recorded from Vietnam by Nomura (2013) are shown by *-mark in the list.

Supertribe Batrisitae

1. *Anama* sp. 1 (Fig. 3A)

Specimens examined. 1 female, Ba Be National Park, by NLT (1 m above the ground), Bac Kan Prov., 3–4. vii. 2014, S. Nomura leg.; 2 males, Tay Yen Tu Natural Sanctuary, by NLT (1 m above the ground), Bac Giang Prov., 7–8. vii. 2014, S. Nomura leg.; 1 male, same data as above, but 9–10. vii. 2014.

Remarks. This undescribed species was already recorded by Nomura *et al.* (2010, 2013) from Kaeng Krachan National Park in Thailand as “*Anama* sp. 1”.

2. *Batriclator trabisoides* Jeannel (Fig. 3B)

Specimen examined. 1 male, Tay Yen Tu Natural Sanctuary, by NLT (1 m above the ground), Bac Giang Prov., 9–10. vii. 2014, S. Nomura leg.

Remarks. This species is described from Tonkin (Hoa-Binh) by Jeannel (1957). It is clearly distinguished by the other species by the large body, the pronotum with a pair of short spines on both lateral sides, and the characteristic shape of the male genitalia.

3. *Trisinus* sp. 1 (Fig. 3C)

Specimens examined. 2 males, Tay Yen Tu Natural Sanctuary, by NLT (1 m above the ground), Bac Giang Prov., 7–8. vii. 2014, S. Nomura leg.; 3 males, same data as above, but 8–9. vii. 2014.

Remarks. This genus has been known as *Batrisoplisus* Jeannel, 1958. It was synonymized by Yin, Nomura and Zhao (2012) with the Genus *Trisinus* Raffray, 1904. It is distributed in the large area from East to Southeast Asia.

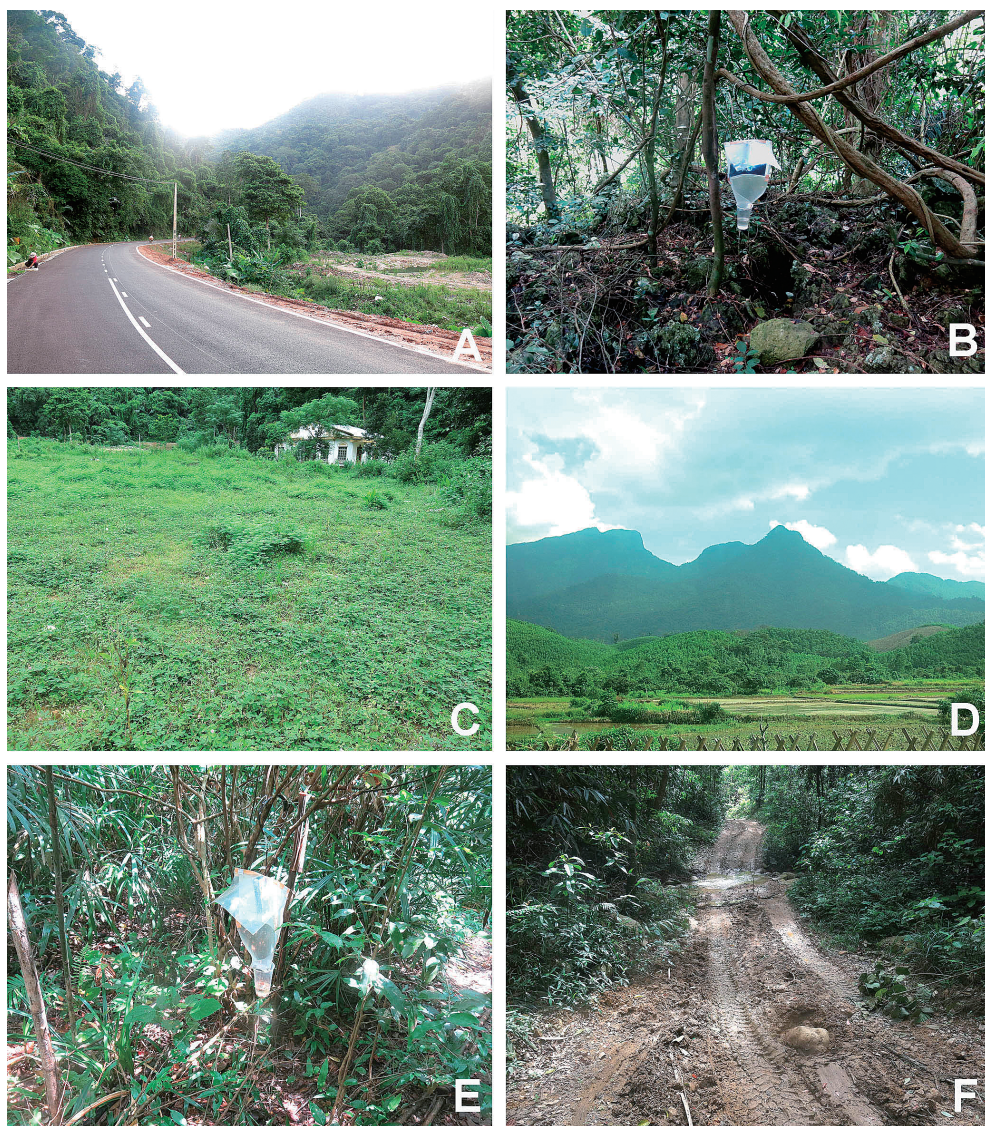


Fig. 2. Habitats and conditions of the traps in the survey at N Vietnam in 2014. A. Ba Be National Park; B. The portable light trap set in Ba Be N. P.; C. A trapped site (grassland) in Ba Be N. P.; D. A view of Tay Yen Tu Natural Sanctuary; E. The portable light trap set in Tay Yen Tu N. S.; F. A trapped site (forest) in Tay Yen Tu N. S.

4. *Batrasiella coomani* (Jeannel) (Fig. 3D)

Specimens examined. 1 male, Tay Yen Tu Natural Sanctuary, by NLT (1 m above the ground), Bac Giang Prov., 7–8. vii. 2014, S. Nomura leg.; 1 male, same data as above, but 9–10. vii. 2014.

Remarks. This species was described by Jeannel (1957) from Hoa Binh, near Tonkin (= Ha Noi) as a member of the genus *Arthromelus*. However, it was moved to this genus by Nomura

(2013) because of the similarity with the other *Batrasiella* species, namely the large sexual patch on the abdominal tergite IV, and the median lobe of male genitalia with the dorsal apophysis closely on the basal capsule.

5. *Batrasiella* sp. 1 (Fig. 3E)

Specimen examined. 1 male, Ba Be National Park, by NLT (1 m above the ground), Bac Kan

Table 1. The species of Pselaphine collected by NLT, with detailed descriptions of the conditions where the species were collected

Date	2nd	3rd	4th	7th	8th	9th	Total
Locality	Ba Be			Tay Yen Tu			
Collected traps/set traps	8/8	7/8	8/8	8/8	3/3	7/8	
Weather	CL	CL	CL/R	CL/R	CL/R	CL/F	
Wind	+	+	+	+	+	+	
Habitat	forest	forest	grassland	forest	forest	forest	
<i>Anama</i> sp. 1		1		2		1	4
<i>Batriclator trabosoides</i>						1	1
<i>Trisinus</i> sp. 1				2	1		3
<i>Batrisiella coomani</i>				1		1	2
<i>Batrisiella</i> sp. 1		1					1
<i>Batrisiella</i> sp. 2	8	6	1				15
<i>Cratna cicatricosa</i>		1				1	2
<i>Cratna abdominalis</i>					1		1
<i>Cratna</i> sp. 1				1			1
<i>Physomerinus</i> sp. 1		1					1
<i>Physomerinus</i> sp. 2			1				1
<i>Arthromelodes reichenbachii</i>						1	2
<i>Bythinoderma</i> sp. 1				1			1
<i>Pareuplectops coomani</i>	1	3				2	6
<i>Pareuplectops</i> sp. 1	1						1
<i>Reichenbachia</i> sp. 1	3						3
<i>Trissemus</i> sp. 1						1	1
<i>Batraxis raffrayana</i>		1					1
<i>Bryaxis</i> sp. 1				1			1
<i>Tychobythinus</i> sp. 1				1		1	2
<i>Pselaphus multangulus</i>		1	1				2
<i>Ancystrocerus</i> sp. 1						1	1
<i>Pselaphodes</i> sp. 2	1					1	2
<i>Nomurais</i> sp. 1					1		1
<i>Sublipalpis myrmecophilus</i>	1						1
<i>Mastiger brevicornis</i>						1	1
Number of species	6	8	3	7	3	11	26
Number of specimens	15	15	3	9	3	12	57

Prov., 3–4. vii. 2014, S. Nomura leg.

Remarks. This undescribed species is easily separated from the other congeneric species by the abdominal tergite IV without large and complicated sexual patch in the male.

6. *Batrisiella* sp. 2 (Fig. 3F)

Specimens examined. 8 males, Ba Be National Park, by NLT (1 m above the ground), Bac Kan Prov., 2–3. vii. 2014, S. Nomura leg.; 6 males, same data as above, but 3–4. vii. 2014, S. Nomura leg.; 1 male, same data as above, but 4–5. vii. 2014.

Remarks. This species is similar to *B. coomani* in having the large sexual patch on the abdominal tergite IV. But, it is separable by the small body and the different structure of the sexual patch.

7. **Cratna cicatricosa* Raffray (Figs. 3G, 4)

Specimens examined. 1 male, Ba Be National Park, by NLT (1 m above the ground), Bac Kan Prov., 3–4. vii. 2014, S. Nomura leg.; 1 male, Tay Yen Tu Natural Sanctuary, by NLT (1 m above the ground), Bac Giang Prov., 9–10. vii. 2014, S. Nomura leg.

Remarks. This species was described by Raffray (1918) from Laos. It is characterized by the long maxillary palpus and the large sexual patch in the male (Fig. 4A–C). It is easily separated from the other congeneric species by having a pair of short carinae on both lateral sides of the central fovea (Fig. 4D). Its sexual patch was observed by SEM and shown in Fig. 4D–F in this study. As shown in Fig. 4F, the secretory seta of the lateral patch is composed of the short basal

Table 2. Supplement and correction to the check-list of the pselaphine species recorded from Vietnam by Nomura (2013)

New species added to the list of Nomura (2013) are shown by *-mark.

Supertribe Batrisitae

**Batrisocenus annamita* Raffray, 1904: 54 (overlooked) Annam.

**Arthromelodes reichenbachi* (Motschulsky, 1851: 486 as *Batrisus*) (recorded by the present study, see remarks) Ba Be N. P., Bac Kan Prov., Tay yen Tu N. S., Bac Giang Prov.; Myammer.

**Cratna cicatricosa* Raffray 1918: 488 (recorded by the present study, see remarks) Tay yen Tu N. S., Bac Giang Prov.; Laos.

**C. abdominalis* Löbl, 1975: 573 (recorded by the present study, see remarks) Tay yen Tu N. S., Bac Giang Prov.; Taiwan.

Supertribe Goniaceritae

Pareuplectops coomani Jeannel, 1957: 7 (systematic position corrected) Hoa Binh; China, Thailand.

**P. fartor* Kurbatov et Cuccodoro, 2009*: 12 (overlooked) Nam Cat Tien.

**P. tenasserimi* (Blatný, 1925)*: 189; = *P. novissimus* (Blatný, 1925): 190 (overlooked) Ben En N. P. (Kurbatov et Cuccodoro, 2009).

**Batraxis raffrayana* (Blatný, 1925)*: 205 (recorded by the present study, see remarks) Ba Be N. P., Bac Kan Prov.; Myanmar, Thailand.

**Rybaxis villosa* Raffray, 1904: 181 (overlooked) Tonkin.

Supertribe Pselaphitae

**Pselaphus pubescens* Raffray, 1904: 321 (overlooked) "Annan".

**Poroderus maindroni* (Raffray, 1909: 44) (overlooked) Saigon.

**Odontalgus gracilis* Raffray, 1904: 469 (overlooked) Deo Bao Loc, Lam Dong Prov.; Sumatra, Myanmar.

O. vestitus Schaufuss, 1886: 243 (distribution corrected as follows) Ho Chi-Minh City ("Saigon"), Hiep Hoa; Sumatra, Borneo.

**Nomuraius piaoacus* Yin et Li, 2013: 565 (recently added, see remarks of *N. sp. 1*) Mt. Pia Oac, Cao Bang Prov.

**Sublalpispis myrmecophilus* (Raffray, 1904: 383) (recorded by the present study, see remarks) Bac Kan Prov.; China (Hong Kong).

Supertribe Clavigeritae

**Mastiger brevicornis* Raffray, 1890: 216 (recorded by the present study, see remarks) Tay yen Tu N. S., Bac Giang Prov.; Singapore.

Fourteen species shown above (*-marked) should be added to the list of pselaphine species recorded from Vietnam, As the result, 111 pselaphine species have been known from Vietnam.

tube and the apical shoe-horn like appendage.

8. **Cratna abdominalis* Löbl (Figs. 3H, 5A, B)

Specimen examined. 1 male, Tay Yen Tu Natural Sanctuary, by NLT (1 m above the ground), Bac Giang Prov., 8–9. vii. 2014, S. Nomura leg.

Remarks. This species described by Löbl (1975) has been known only from Taiwan. This is the first record from the continental Asia. It is clearly separated from the other species by the male abdominal tergite IV lacking sexual patch on the dorsal side.

9. *Cratna* sp. 1 (Fig. 3I, 5C, D)

Specimen examined. 1 male, Tay Yen Tu Natural Sanctuary, by NLT (1 m above the ground), Bac Giang Prov., 7–8. vii. 2014, S. Nomura leg.

Remarks. This species is easily distinguished from the former species in the male by the short maxillary palpus and the large conical projection on the posterior side of abdomen (Fig. 5C, D).

10. *Physomerinus* sp. 1 (Fig. 3J)

Specimen examined. 1 male, Ba Be National Park, by NLT (1 m above the ground), Bac Kan Prov., 3–4. vii. 2014, S. Nomura leg.

Remarks. This genus is characterized by the hind femur with large sexual patch in the male. This species is similar to the type species of this genus, *P. septemfoveolatus* (Schaufuss, 1877) also known from Vietnam (Ho Chi-minh City = Saigon). But, it is easily separable by the different structure of the sexual patch.



Fig. 3. Photos of pselaphine species collected in the survey. A. *Anama* sp. 1; B. *Batriclactor trabisoides*; C. *Trisnus* sp. 1; D. *Batrasiella coomani*; E. *B.* sp.1; F. *B.* sp.2; G. *Cratna cicatricosa*; H. *C. abdominalis*; I. *C.* sp. 1; J. *Physomerinus* sp. 1; K. *P.* sp. 2; L. *Arthromelodes reichenbachii*; M. *Bythinoderma* sp. 1; N. *Pareuplectops coomani*; O. *P.* sp. 1; P. *Reichenbachia* sp. 1; Q. *R.* sp. 2; R. *Trissemus.* sp. 1; S. *Atenisodus* sp. 1; T. *Batraxis raffrayana*; U. *Bryaxis* sp. 1; V. *Tychobythinus* sp. 1; W. *Pselaphus multangulus*; X. *Ancystrocerus* sp. 1; Y. *Pselaphodes* sp. 1; Z. *P.* sp. 2; AA. *Nomuraius* sp. 1; AB. *Sublipalpis myrmecophilus*; AC. *Centrophthalmus* sp. 1; AD. *Mastiger brevicornis*.

11. *Physomerinus* sp. 2 (Fig. 3K)

Specimen examined. 1 male, Ba Be National Park, by NLT (1 m above the ground), Bac Kan Prov., 4–5. vii. 2014, S. Nomura leg.

Remarks. This undescribed species differs from the congeneric species by the different structure of the sexual patch on the hind femur.

12. **Arthromelodes reichenbachii* (Motschulsky) (Fig. 3L)

Specimens examined. 1 male, Ba Be National Park, 226 m alt., by LT, Bac Kan Prov., 4. vii. 2014, H. Yoshitomi leg.; 1 male, Tay Yen Tu Nat-

ural Sanctuary, by NLT (1 m above the ground), Bac Giang Prov., 9–10. vii. 2014, S. Nomura leg.

Remarks. This species was described from “Ind. or.” by Motschulsky (1851). The type locality was abbreviated from “Indes Orientale” which is known to be Tenasserim, S Myanmar. This species is easily separated from the other species of this genus by the bent antennae and the very large sexual patch on the abdominal tergite IV in the male. It is very closely allied to *A. cariei* Jeannel, 1954 also known from Vietnam.

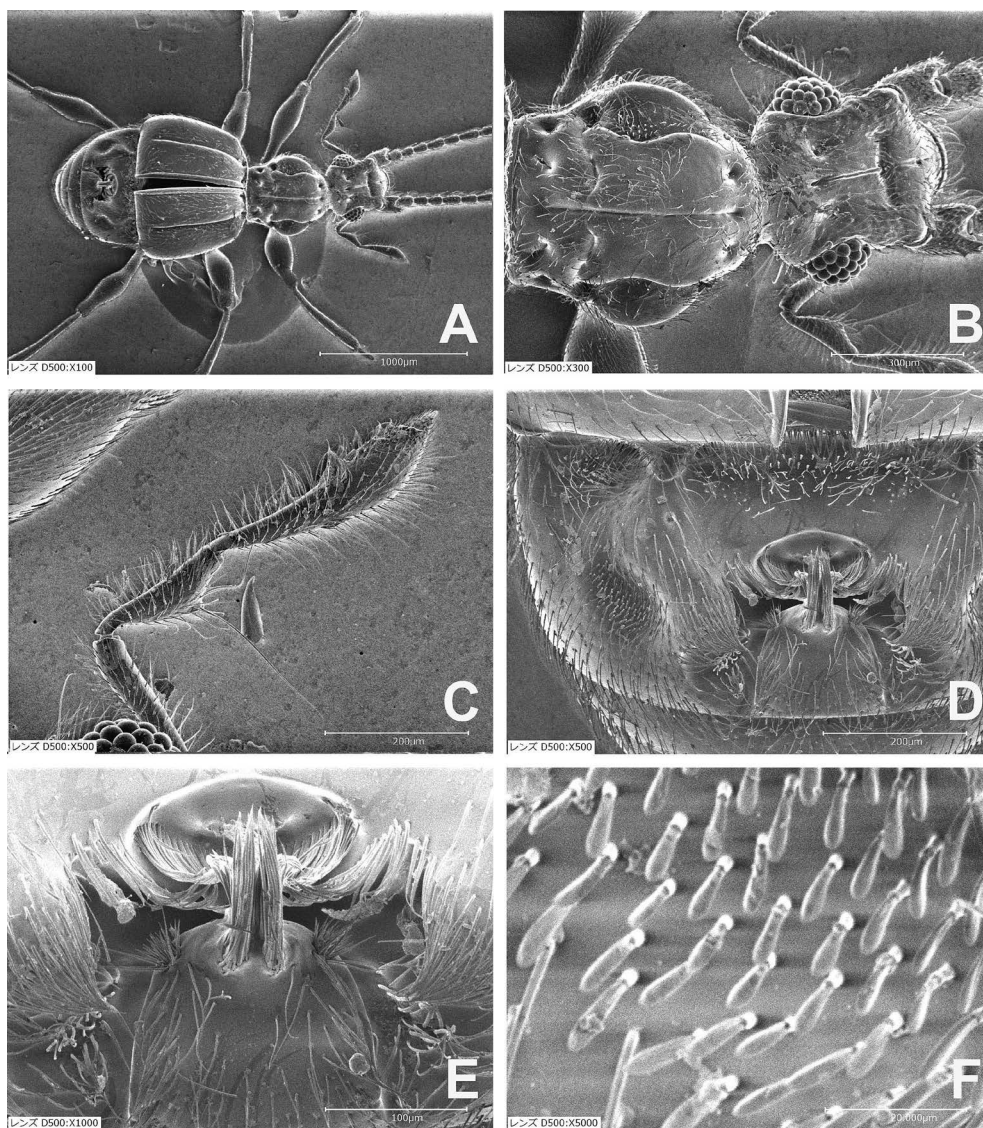


Fig. 4. SEM photos of *Cratna cicatricosa*. A. habitus; B. head and pronotum in dorsal view; C. maxillary palpus; D. abdominal tergite IV; E. ditto, sexual patch enlarged; F. ditto, secretory hairs enlarged.

Supertribe Goniaceritae

13. *Bythinoderma* sp. 1 (Fig. 3M)

Specimen examined. 1 male, Tay Yen Tu Natural Sanctuary, by NLT (1 m above the ground), Bac Giang Prov., 7–8. vii. 2014, S. Nomura leg.

Remarks. The genus *Bythinoderma* was described by Reitter (1883) from Borneo on the basis of the type species, *B. grabowskyi* (see Nomura and Mohamed, 2008). In Nomura and

Mohamed (2008), it was classified into the sub-tribe Natypleurina, the tribe Iniocyphini. However, it should be included into the tribe Proterini as shown in Nomura (2013). Up to the present, two species of this genus have been known from Borneo, Sumatra and Vietnam. One species of this genus *B. marginata* Raffray was recorded from Hiep Hoa, S Vietnam by Jeannel (1952) (Nomura, 2013). This genus is similar to the other proterine genera, *Proterus*, *Mechanicus* and

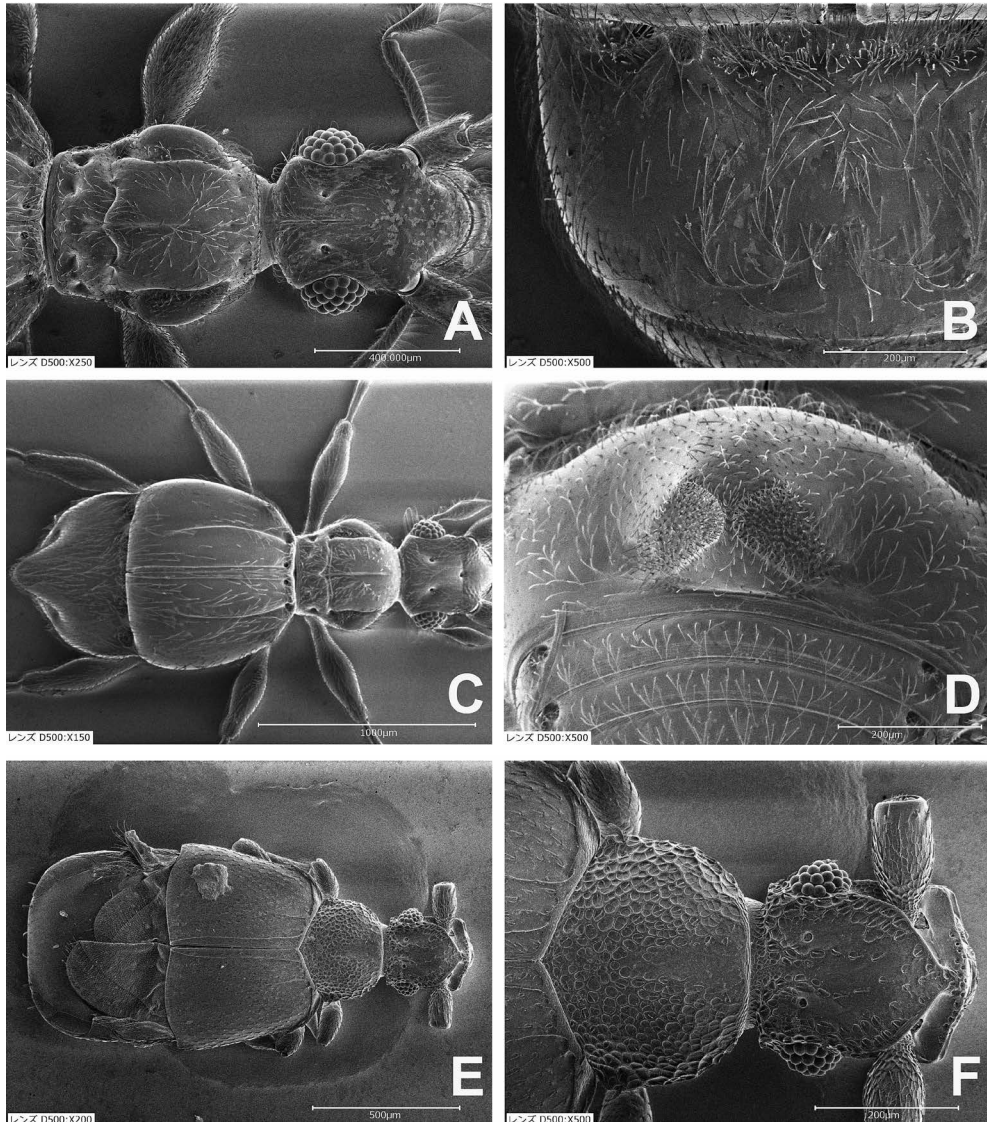


Fig. 5. SEM photos of pselaphine species. A. *Cratna abdominalis*, head and pronotum in dorsal view; B. ditto, abdominal tergite IV; C. *Cratna* sp. 1, habitus; D. ditto, sexual patch enlarged; E. *Mastiger brevicornis*, habitus; F. ditto, head enlarged.

Imtempus in the broadened body and the short and transverse head, but is easily separable by the pronotum with 3 longitudinal and a pair of short transverse sulci.

14. *Pareupectops coomani* Jeannel (Fig. 3N)

Specimens examined. 1 male, Ba Be National Park, by NLT (1 m above the ground), Bac Kan Prov., 2–3. vii. 2014, S. Nomura leg.; 2 males, 1

female, same data as above, but 3–4. vii. 2014; 2 males, Tay Yen Tu Natural Sanctuary, by NLT (1 m above the ground), Bac Giang Prov., 9–10. vii. 2014, S. Nomura leg..

Remarks. This species was described by Jeannel (1957) from Tonkin (= Ha Noi), Vietnam. It was also recorded from Thailand and China by Nomura and Idris (2008). In Nomura (2013), this species was classified into the supertribe Euplec-

titae (tribe unknown). However, it should be classified as a member of the supertribe Goniaceritae, tribe Proterini as shown in Kurbatov and Cuccodoro (2009).

15. *Pareuplectops* sp. 1 (Fig. 3O)

Specimen examined. 1 male, Ba Be National Park, by NLT (1 m above the ground), Bac Kan Prov., 2–3. vii. 2014, S. Nomura leg.

Remarks. As pointed by Nomura and Idris (2008), this genus is distributed in large area of Southwest Asia.

16. *Reichenbachia* sp. 1 (Fig. 3P)

Specimens examined. 1 male, 2 female, Ba Be National Park, by NLT (1 m above the ground), Bac Kan Prov., 2–3. vii. 2014, S. Nomura leg.

Remarks. The genus *Reichenbachia* is very closely allied to the following genus, *Trissemus*. However, it is easily distinguishable by the elytra each with two basal foveae (three in *Trissemus*). This species is separable from the other congeneric species by the small body and the very small antennal segment X.

17. *Reichenbachia* sp. 2 (Fig. 3Q)

Specimen examined. 1 male, Tay Yen Tu Natural Sanctuary, 149 m alt., by LT, Bac Giang Prov., 8. vii. 2014, H. Yoshitomi leg.

Remarks. This species is closely allied to the former species, but is separable by the large body and the larger antennal segment X.

18. *Trissemus* sp. 1 (Fig. 3R)

Specimen examined. 1 male, Tay Yen Tu Natural Sanctuary, by NLT (1 m above the ground), Bac Giang Prov., 9–10. vii. 2014, S. Nomura leg.

Remarks. This species is easily separable from the other congeneric species by the clearly broadened antennal segment III.

19. *Atenisodus* sp. 1 (Fig. 3S)

Specimen examined. 1 female, Tay Yen Tu Natural Sanctuary, 79 m alt., by LT, Bac Giang Prov., 9. vii. 2014, H. Yoshitomi leg.

Remarks. The genus *Atenisodus* is very similar

to the genus *Comatopselaphus* Schaufuss, 1882 known from the tropical Asia, but is separable by the coarsely punctate pronotum and the truncate abdomen.

20. **Batraxis raffrayana* (Blattný) (Fig. 3T)

Specimen examined. 1 male, Ba Be National Park, by NLT (1 m above the ground), Bac Kan Prov., 3–4. vii. 2014, S. Nomura leg.

Remarks. This species was described by Blattný (1925) as the type species of a new genus *Raffrayella* from Tenasserim, S Myanmar. The genus was synonymized with *Batraxis* by Besuchet (1986). This species was also recorded from Yangon, C Myanmar by Nomura et Idris (2008). Nomura, Sakchoowong and Chanpaisaeng (2010) reported it also from Thailand.

21. *Bryaxis* sp. 1 (Fig. 3U)

Specimen examined. 1 male, Tay Yen Tu Natural Sanctuary, by NLT (1 m above the ground), Bac Giang Prov., 7–8. vii. 2014, S. Nomura leg.

Remarks. This and the next genera are included in the tribe Bythinini, which is distinctly diversified in the Palearctic Region, and is limited in the tropical to subtropical area. According to Nomura (2013), this genus has not been known from Vietnam. This species is characterized by the short and broadened body and the strongly thickened antennal segment I, which is a male sexual character.

22. *Tychobythinus* sp. 1 (Fig. 3V)

Specimens examined. 1 male, Tay Yen Tu Natural Sanctuary, by NLT (1 m above the ground), Bac Giang Prov., 7–8. vii. 2014, S. Nomura leg.; 1 male, same data as above, but 9–10. vii. 2014.

Remarks. This genus is also recorded from Vietnam by the present study for the first time. It is clearly distinguished by the long and elongate antennal segment I. It is widely distributed in the Palearctic Region including Japanese mainland and Taiwan.

Supertribe Pselaphitae

23. *Pselaphus multangulus* Schaufuss (not *Pselaphidius*) (Fig. 3W)

Specimens examined. 1 male, Ba Be National Park, by NLT (1 m above the ground), Bac Kan Prov., 3–4. vii. 2014, S. Nomura leg.; 1 female, same data as above, but 4–5. vii. 2014,

Remarks. This species has been known from some countries of Southeast Asia. In many cases, it was collected by light trap. In Nomura (2013), the first author identified it as a member of the genus *Pselaphidius*. However, it should be reclassified into the genus *Pselaphus* in the present study.

24. *Ancyrocerus* sp. 1 (Fig. 3X)

Specimen examined. 1 male, Tay Yen Tu Natural Sanctuary, by NLT (1 m above the ground), Bac Giang Prov., 9–10. vii. 2014, S. Nomura leg.

Remarks. The genus *Ancyrocerus* had been classified into the Tribe Tyrini (Newton and Chandler, 1989), but, it should be moved to the tribe Tmesiphorini. It is known to be distributed in tropical Asia as shown in Newton and Chandler (1989).

25. *Pselaphodes* sp. 1 (Fig. 3Y)

Specimens examined. 17 males, Ba Be National Park, 226 m alt., by LT, Bac Kan Prov., 4. vii. 2014, H. Yoshitomi leg.; 2 males, same locality as above, 5. vii. 2014, S. Nomura leg.

Remarks. Many species of this genus are known from southern part of China by Yin *et al.*, 2010, and their many articles. It is also distributed in Southeast Asia including Vietnam. However, all Vietnamese species of this genus are still unnamed.

26. *Pselaphodes* sp. 2 (Fig. 3Z)

Specimens examined. 1 male, Ba Be National Park, by NLT (1 m above the ground), Bac Kan Prov., 2–3. vii. 2014, S. Nomura leg.; 1 female, same locality as above, but 226 m alt., 4. vii. 2014, H. Yoshitomi leg.; 1 male, Tay Yen Tu Natural Sanctuary, by NLT (1 m above the ground), Bac Giang Prov., 9–10. vii. 2014, S. Nomura leg.

Remarks. This is also one of the undescribed species.

27. *Nomuraius* sp. 1 (Fig. 3AA)

Specimen examined. 1 male, Tay Yen Tu Natural Sanctuary, by NLT (1 m above the ground), Bac Giang Prov., 8–9. vii. 2014, S. Nomura leg.

Remarks. This species is an undescribed species, which is very closely allied to *N. vietnamicus* described by Hlaváč (2002) from Mt. Tam Dao, Vinh Phu Province, N Vietnam. Later, Yin and Li (2013) described a new species of this genus, *N. piaoacus* from Mt. Pia Oac, Cao Bang Province, N Vietnam. The latter species should be added to the Vietnamese fauna.

28. **Sublipalpis myrmecophilus* (Raffray) (Fig. 3AB)

Specimen examined. 1 male, Ba Be National Park, by NLT (1 m above the ground), Bac Kan Prov., 2–3. vii. 2014, S. Nomura leg.

Remarks. This large-sized species belonging to the tribe Tyrini was described from Hong Kong, S China, by Raffray (1904). This is the first record of this genus from Vietnam.

29. *Centrophthalmus* sp. 1 (Fig. 3AC)

Specimens examined. 2 males, 2 females, Tay Yen Tu Natural Sanctuary, 149 m alt., by LT, Bac Giang Prov., 8. vii. 2014, H. Yoshitomi leg.; 4 males, 1 female, same locality as above, but 79 m alt., 9. vii. 2014.

Remarks. This genus is well known in the Oriental Region including Southwest Asia. It is already recorded from Vietnam together with four species.

Supertribe Clavigeritae

30. **Mastiger brevicornis* Raffray (Figs. 3AD, 5E, F)

Specimen examined. 1 male, Tay Yen Tu Natural Sanctuary, by NLT (1 m above the ground), Bac Giang Prov., 9–10. vii. 2014, S. Nomura leg.

Remarks. This characteristic species is recorded from Vietnam by the present study for

the first time. It was described by Raffray (1890) from Singapore. Nomura *et al.* (2010) recorded it from Kaeng Krachan National Park, W Thailand. However, it was corrected to an undescribed species (*M. sp. 1*) by Nomura *et al.* (2013).

Results by NLTs Tabulated

The collected pselaphine species by portable light traps (NLT) are tabulated in Table 1. The weather and wind conditions and habitats of the trapped points are also included. The abbreviation in the line of weather is as follows: CL: clouded; F: fine; R: rain.

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