CHECKLIST OF THE LARGE CENTIPEDES (CHILOPODA: SCOLOPENDROMORPHA) FROM LO GO - XA MAT NATIONAL PARK, TAY NINH PROVINCE, VIETNAM

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- Highlights:

- ✓ This study provides the first baseline dataset on the species composition of large centipedes in one of the least surveyed regions of southern Vietnam.
- ✓ The results enrich current knowledge on the scolopendromorph fauna of the transitional ecological zone between the Southeastern and Central Highlands regions, thereby contributing to a better understanding of the distribution and diversity of this group in Vietnam.
- ✓ Additionally, the study expands the known distributional ranges of several noteworthy species.

- Abstract: A study on the large centipede fauna (Chilopoda: Scolopendromorpha) was conducted in Lo Go - Xa Mat National Park (Tay Ninh Province, southern Vietnam) through two field surveys in March and July 2024. The primary aim of the study was to provide a species checklist for the national park and to update taxonomic and distributional data of scolopendromorph centipedes in a tropical region that remains poorly explored. Specimens were collected using standard soil fauna sampling techniques, including quadrat digging, soil sieving, pitfall trapping, and random sampling along forest transects. All specimens were preserved in ethanol and examined morphologically under stereomicroscopes for taxonomic identification. A total of eleven species and subspecies belonging to five genera and three families within the order Scolopendromorpha were identified, including: *Alluropus calcaratus*, *Cryptops (Cryptops) tahitianus*, *Cryptops (Paracryptops) indicus*, *Otostigmus aculeatus*, *Otostigmus multidens*, *Otostigmus politus*, *Otostigmus scaber*, *Scolopendra dehaani*, *Scolopendra gracillima sternostriata*, *Scolopendra morsitans*, and *Scolopendra subspinipes*. Among these, nine species and subspecies represent new records for the

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area. Although *Scolopendra morsitans* had been previously reported from the park, it was not encountered in the present study. This study provides an updated checklist of scolopendromorph species in Lò Gò - Xa Mát National Park, together with details of the specimen collection sites and species distributions in Vietnam and globally. The results highlight the high species richness and ecological significance of the park for invertebrate conservation. Moreover, the findings contribute to the national taxonomic database and serve as a scientific basis for biodiversity monitoring, conservation planning, and ecological management in Vietnam.

- Keywords: *centipedes; biodiversity; taxonomy; distribution; South of Vietnam.*

1. INTRODUCTION

Knowledge about centipedes in the southern region of Vietnam in general, and in Lo Go – Xa Mat National Park (NP) in particular remains very poor. Studies by Schileyko (2007) and Tran *et al*. (2013) indicated that only two species have been recorded in Lo Go – Xa Mat NP: *Otostigmus multidens* and *Scolopendra morsitans* [1, 2]. Although there have been recent studies on centipede fauna in Vietnam, these studies mainly focus on a few national parks and nature reserves in the northern region, such as Hoang Lien NP, Phia Oac – Phia Den NP, and Ta Xua Nature Reserve (NR).

Lo Go – Xa Mat NP is located in the Southeast region of Vietnam, within the coordinates 11°02' - 11°47'N, 105°57' - 106°04'E, in Tan Bien District, Tay Ninh Province. This area serves as a transitional zone between the Central Highlands, Southeast, and Southwest regions of Vietnam. With its special location and a predominant area covered by evergreen broadleaf forests (over 70%), the park exhibits high biodiversity, reflected in its diverse ecosystems, landscapes, species, and genetic resources. To date, Lo Go – Xa Mat NP has recorded 580 animal species, including 42 species of Mammals, 203 species of Birds, 59 species of Reptiles, 25 species of Amphibians, 128 species of Insects, 88 species of Fish, 35 species of benthic animals, and 2 species centipedes. Additionally, this is home to 934 plant species, belonging to 492 genera, 128 families, and 57 orders, 6 divisions [2, 3].

To gain a more comprehensive understanding of the biodiversity in Lo Go – Xa Mat NP, this study will provide additional data on the centipede fauna, contributing to the management and conservation of biodiversity in general.

2. MATERIAL AND METHODS

2.1. Material

A total of 57 specimens of large centipedes were recorded from field surveys in Lo Go – Xa Mat NP, Tan Bien, Tay Ninh Province conducted in March and July 2024.

2.2. Methods

The specimens were recorded using standard methods in soil fauna research, including quadrant digging, soil sieving, and random sampling (random sampling was conducted along transects following forest trails). Detailed information about the specimens, such as coordinates, altitude, and habitat... was also recorded. Following collection, the specimens

were preserved in 75–80% ethanol and subsequently stored at the laboratory of the Joint Vietnam-Russia Tropical Science and Technology Research Centre (VRTC).

The morphological characteristics of the specimens were observed, described, and photographed using a DinoLite Edge handheld digital microscope connected to a computer via USB port, as well as an Olympus SZ61 microscope connected to an Olympus SC180 camera.

The morphological characteristics were based on the documentation provided by Bonato et al. (2010) [4]. The specimens were identified using identification keys from Schileyko (2007, 2020) [1, 5], Siriwut *et al.* (2016, 2018) [6, 7], and Vu Thi Ha *et al.* (2020) [8].

Abbreviations: spm(s) – specimen(s); NP – National Park; NR – Natural Reserve; col. Collector; m – meter.

3. RESULTS AND DISCUSSIONS

Taxonomic part

Order Scolopendromorpha Leach, 1814

Họ Cryptopidae Kohlrausch, 1881

Giống *Cryptops* Leach, 1815

1. *Cryptops (Cryptops) tahitianus* Chamberlin, 1920 (Figures 1C-D)

Material examined: 1 spm ♂ (VRTC.LG-XM.03), 11.58636ºN, 105.88221ºE, 13 m, broadleaf forest, 12 March 2024, col. Le X. Son; 1 spm ♂ (VRTC.LG-XM.35), 11.72318ºN, 106.03590ºE, 40 m, broadleaf forest, col. Nguyen D. Hung; 1 spm (VRTC.LG-XM.42), 11.73774ºN, 106.05169ºE, 36 m, broadleaf forest, 15 March 2024, col. Nguyen D. Hung.

Distribution: ***Asia:*** India [2]; **Vietnam:** Lao Cai (Hoang Lien NP), Phu Tho, Son La (Xuan Nha NR, Ta Xua NR), Hue, Da Nang (Ba Na forest), Gia Lai, Lam Dong (Langbian plateau) [2, 9-11].

Remark: The specimens studied have characteristics that are appropriate to the description provided by Attems (1930) [12]. Schileyko (2007) also emphasized that, morphologically, this species is similar to *Cryptops (Cryptops) doriae*, with the only difference being the absence of "saw-teeth" on the femoral segment of the last leg [1].

2. *Cryptops (Paracryptops) indicus* Silvestri, 1924 (Figure 2E)

Material examined: 1 spm ♀ (VRTC.LG-XM.34), 11.72540ºN, 106,03560ºE, 37m, broadleaf forest, 14 March 2024, col. Le X. Son; 1 spm ♀ (VRTC.LG-XM.52), 11.55313ºN, 105.87635ºE, 15m, broadleaf forest, 22 July 2024, col. Le X. Son.

Distribution: ***Asia:*** India [2]; ***Vietnam:*** Son La (Ta Xua NR), Gia Lai (Kon Ha Nung plateau), Lam Dong (Langbian plateau), Dong Nai (Ma Da NR, Cat Tien NP), Khanh Hoa (Truong Sa archipelago), Ninh Thuan (Nui Chua NP), Kien Giang [2, 10, 13, and 14].

Remark: Schileyko (2007) reported a long, longitudinal groove on tergites 2(3) to 20 of *C. (P.) indicus*, similar to the description by Attems (1930) regarding the cross-sharp

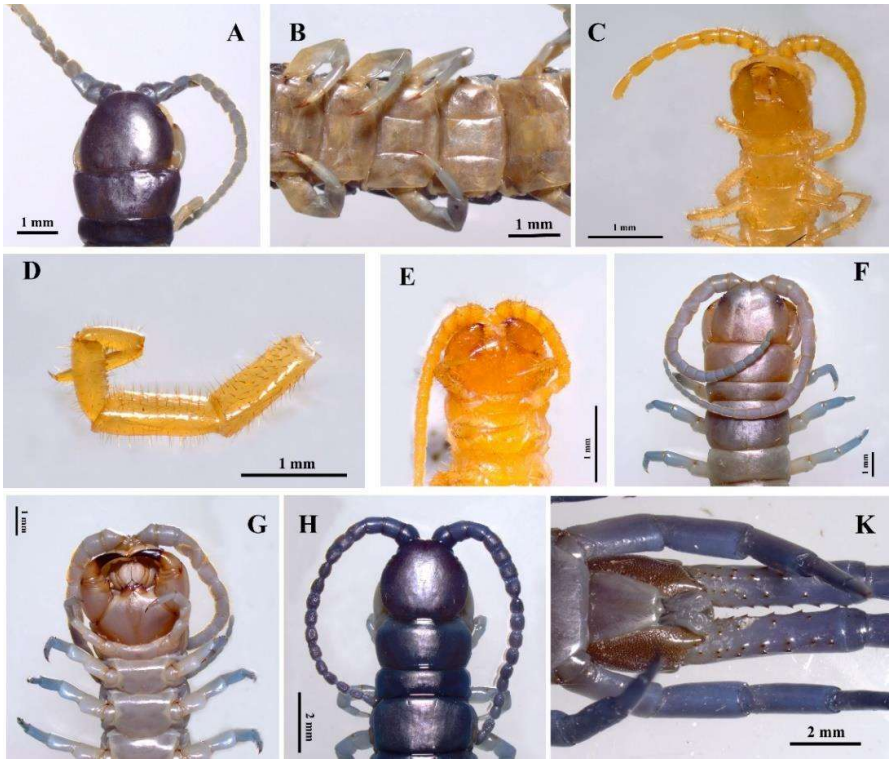
grooves on the tergites [1, 12]. However, in the specimens in this study the longitudinal groove was absent, and only horizontal grooves were observed.

Family Scolopendridae Leach, 1814

Genus *Alluropus* Silvestri, 1911

3. *Alluropus calcaratus* (Pocock, 1891) (Figures 1A-B)

Material examined: 1 spm ♀ (VRTC.LG-XM.49), 11.55313ºN, 105.87635ºE, 15 m, broadleaf forest, 21 July 2024, col. Le X. Son; 2 spms ♀ (VRTC.LG-XM.56; VRTC.LG-XM.60), 11.73398ºN, 106.68295ºE, 42 m, broadleaf forest, 22 July 2024, col. Le X. Son.



Figures 1. A-B: *Alluropus calcaratus* (A- cephalic plate and tergite 1st; B- sternites); C-D: *Cryptops (Cryptops) tahitianus* (C- forcipular segment; D- last leg); E: *Cryptops (Paracryptops) indicus* (forcipular segment); F-G: *Otostigmus multidens* (F- Cephalic and tergites 1-4; G- forcipular segment); H-K: *Otostigmus aculeatus* (H- Cephalic and tergites 1-3; K- Last sternite and last legs).

Distribution. ***Asia:*** Thailand, Laos, Cambodia [2]; ***Vietnam:*** Ha Nam province (Phu Ly), Tay Ninh province (Lo Go - Xa Mat NP) [2].

Remark: *A. calcaratus* was previously only recorded in Phu Ly (Ha Nam) with two specimens by Attems (1930) [12]. Therefore, the discovery of this species in the southern region of Vietnam is quite unexpected due to the considerable geographical distance.

Morphologically, when comparing the characteristics of the specimens in this study with the descriptions of *A. calcaratus* by Siriwut (2018) in Southeast Asia, they align perfectly. However, the specimens in this study are notably smaller in size compared to Siriwut's description (32mm compared to 52mm in Siriwut) [7].

Genus *Otostigmus* Porat, 1876

4. *Otostigmus (Otostigmus) aculeatus* Haase, 1887 (Figures 1H-K)

Material examined: 1 spm ♀ (VRTC.LG-XM.01), 11.58670ºN, 105.88226ºE, 14 m, broadleaf forest, 12 March 2024, col. Le X. Son; 1 spm ♂ (VRTC.LG-XM.13), 11.56737ºN, 105.92160ºE, 32m, broadleaf forest, 13 March 2024, col. Nguyen D. Hung; 1 spm ♀ (VRTC.LG-XM.15), 11.56969ºN, 105.91831ºE, 22 m, broadleaf forest, 13 March 2024, col. Nguyen D. Hung; 1 spm ♀ (VRTC.LG-XM.16), 11.57045ºN, 105.90488ºE, 34 m, broadleaf forest, 13 March 2024, col. Le X. Son; 1 spm ♂ (VRTC.LG-XM.21), 11.72277ºN, 106.04282ºE, 35 m, broadleaf forest, 14 March 2024, col. Nguyen D. Hung; 1 spm ♂ (VRTC.LG-XM.23), 11.72284ºN, 106.04325ºE, 49 m, broadleaf forest, 14 March 2024, col. Nguyen D. Hung; 1 spm ♀ (VRTC.LG-XM.38), 11.72318ºN, 106.03590ºE, 40 m, broadleaf forest 14 March 2024, col. Nguyen D. Hung; 1 spm ♀ (VRTC.LG-XM.43), 11.74081ºN, 106.05121ºE, 44 m, broadleaf forest, 15 March 2024, col. Nguyen D. Hung; 1 spm ♀ (VRTC.LG-XM.44), 11.73727ºN, 106.05172ºE, 12 m, broadleaf forest, 15 March 2024, col. Nguyen D. Hung; 1 spm ♂ (VRTC.LG-XM.57), 11.55313ºN, 105.87635ºE, 15 m, broadleaf forest, 22 July 2024, col. Le X. Son.

Distribution: ***Asia:*** Laos, Indonesia, Taiwan, China [1]; ***Vietnam:*** Dien Bien (Muong Nhe NR), Son La (Xuan Nha NR, Ta Xua NR), Hoa Binh (Mai Chau District, Thuong Tien NR), Lao Cai (Hoang Lien NP), Cao Bang (Phia Oac – Phia Den NP), Thai Binh (Tien Hai NR), Quang Ninh; Hai Phong (Cat Ba NP); Ha Noi (Ba Vi NP); Vinh Phuc (Tam Dao NP); Ninh Binh (Cuc Phuong NP); Nghe An (Pu Mat Np, Pu Hoat NR), Quang Binh (Phong Nha - Ke Bang NP), Quang Nam (Cu Lao Cham Island); Kon Tum (Thach Nham forest); Gia Lai (An Khe District, Kon Ka Kinh NP); Dong Nai (Ma Da; Cat Tien NP); Kien Giang (Tho Chu Island) (2, 8-10, and 15-19].

Remark: *O. (O.) aculeatus* is one of the most widely distributed species in Vietnam [8]. It exhibits certain variations in different environmental conditions, it also has been reported in Schileyko (2007) with two morphological types and Vu Thi Ha et al. (2020) with three morphological types [1, 8].

5. *Otostigmus (Otostigmus) multidens* Haase, 1887 (Figures 1F-G)

Material examined: 1 spm ♀ (VRTC.LG-XM.05), 11.58489ºN, 105.88442ºE, 10 m, broadleaf forest, 12 March 2024, col. Le X. Son; 1 spm ♂ (VRTC.LG-XM.06), 11.58731ºN, 105.89082ºE, 23 m, broadleaf forest, 12 March 2024, col. Nguyen D. Hung; 2 spms ♂ (VRTC.LG-XM.18; VRTC.LG-XM.19), 11.56312ºN, 105.90247ºE, 37 m, broadleaf forest, 13 March 2024, col. Le X. Son; 1 spm ♀ (VRTC.LG-XM.28), 11.7254ºN, 106.0356ºE, 37 m, broadleaf forest, 14 March 2024, col. Le X. Son; 1 spm ♀ (VRTC.LG-XM.31), 11.72384ºN, 106.03392ºE, 49 m, broadleaf forest, 14 March 2024, col. Le X. Son; 2 spms ♀ (VRTC.LG-XM.36; VRTC.LG-XM.37), 11.72318ºN, 106.03590ºE, 40 m, broadleaf forest, 14 March 2024, col. Nguyen D. Hung; 1 spm ♂ (VRTC.LG-XM.40),

11.73812ºN, 106.05148ºE, 41 m, broadleaf forest, 15 March 2024, col. Nguyen D. Hung; 1 spm ♂ (VRTC.LG-XM.47), 11.73716ºN, 106.05134ºE, 44 m, broadleaf forest, 15 March 2024, col. Nguyen D. Hung; 1 spm ♀ (VRTC.LG-XM.63), 11.55313ºN, 105.87635ºE, 15 m, broadleaf forest, 22 July 2024, col. Le X. Son; 1 spm ♀ (VRTC.LG-XM.68), 11.73398ºN, 106.68295ºE, 42 m, broadleaf forest, 23 July 2024, col. Le X. Son.

Distribution: ***Asia:*** Indonesia, Papua New Guinea [1]; ***Vietnam:*** Dien Bien (Muong Nhe NR), Hoa Binh (Mai Chau, Thuong Tien NR), Cao Bang (Phia Oac - Phia Den NP), Ha Noi (Ba Vi NP), Hai Phong (Cat Ba NP), Nghe An (Pu Mat NP), Ha Tinh (Vu Quang NP), Quang Binh (Phong Nha - Ke Bang NP), Khanh Hoa (Nha Trang), Ninh Thuan (Nui Chua NP), Gia Lai (An Khe District, Buon Luoi), Da Nang, Lam Dong (Da Lat), Dong Nai (Cat Tien NP, Ma Da); Tay Ninh (Lo Go - Xa Mat NP), Ba Ria - Vung Tau (Hang Bai Khang Island) [1, 8, and 14-17].

Remark: Similar to *O. (O.) aculeatus*, *O. (O.) multidens* is also a species with a very wide distribution, found across most geographical regions of Vietnam. This species has also been recorded in various morphological types.

6. *Otostigmus (Otostigmus) politus* Karsch, 1881 (Figures 2A-B)

Material examined: 1 spm (VRTC.LG-XM.51), 11.55313ºN, 105.87635ºE, 15 m, broadleaf forest, 22 July 2024, col. Le X. Son.

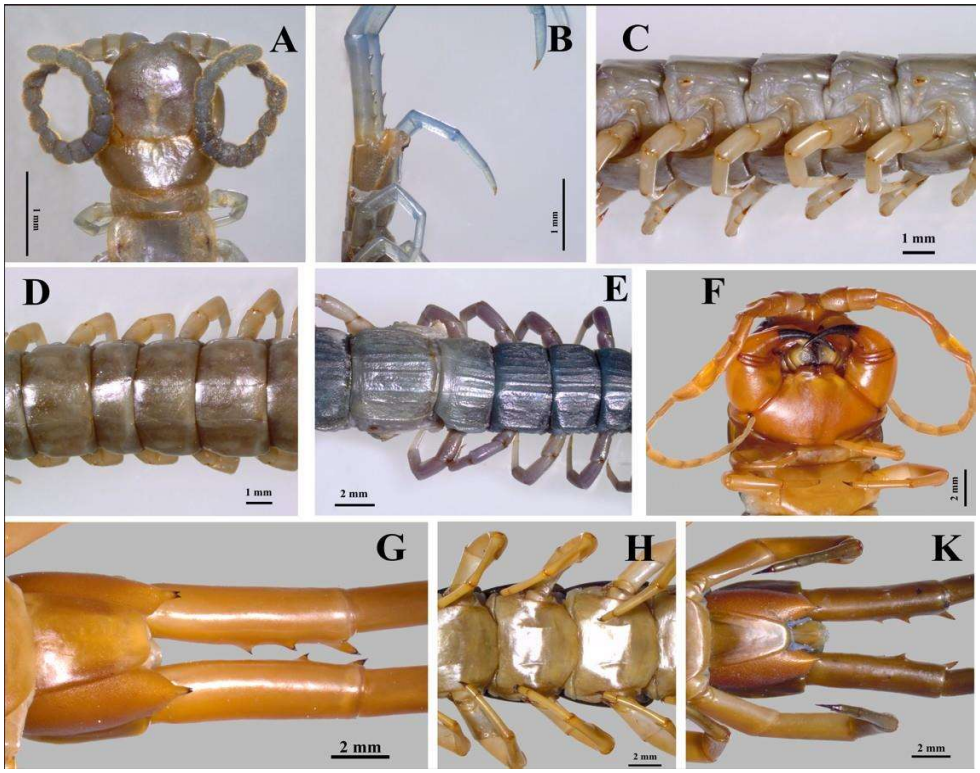


Figure 2. A-B: *Otostigmus (O.) politus* (A- cephalic plate and tergites 1-3; B- leg-bearing segment 20-21 and prefemora of last legs, lateral view); C-D: *Scolopendra*

gracillima sternostriata (C- body segment, laterl view; D- tergites); E: *Otostigmus (O.) scaber* (tergites with longitudinal keels); F-G: *Scolopendra dehaani* (F- forcipular segment, G- Coxopleural process and prefemora of last legs); H-K: *Scolopendra subspinipes* (H- Tergites; K- Coxopleural process and prefemora of last legs).

Remark: *O. (O.) politus* is a species that is not commonly found in Vietnam. Although it has been recorded in some areas, the number of individuals encountered is typically very low [8]. In this study, we also recorded only one specimen.

Distribution: ***Asia:*** China, Myanmar, Cambodia, Korea [9]; ***Vietnam:*** Lao Cai (Hoang Lien NP), Hoa Binh (Mai Chau), Son La (Xuan Nha NR), Kon Tum (Thach Nham forest) [9, 18, and 19].

7. *Otostigmus (Otostigmus) scaber* Porat, 1876 (Figures 2E)

Material examined: 1 spm ♀ (VRTC.LG-XM.24), 11.7254ºN, 106.0356ºE, 37 m, broadleaf forest,14 March 2024, col. Le X. Son; 1 spm ♀ (VRTC.LG-XM.26), 11,7254ºN, 106.0356ºE, 37 m, broadleaf forest, 14 March 2024, col. Le X. Son; 1 spm ♂ (VRTC.LG-XM.27), 11.7254ºN, 106.0356ºE, 37 m, broadleaf forest, 14 March 2024, col. Le X. Son; 1 spm ♀ (VRTC.LG-XM.32), 11.72648ºN, 106.03554ºE, 46 m, broadleaf forest, 14 March 2024, col. Le X. Son; 1 spm ♂ (VRTC.LG-XM.34), 11.72318ºN, 106.03590ºE, 40 m, broadleaf forest, 14 March 2024, col. Le X. Son; 1 spm ♂ (VRTC.LG-XM.50), 11.55313ºN, 105.87635ºE, 15 m, broadleaf forest, 22 July 2024, col. Le X. Son; 1 spm ♂ (VRTC.LG-XM.55), 11.55313ºN, 105.87635ºE, 15 m, broadleaf forest, 22 July 2024, col. Le X. Son; 1 spm ♀ (VRTC.LG-XM.65), 11.55313ºN, 105.87635ºE, 15 m, broadleaf forest, 22 July 2024, col. Le X. Son.

Distribution: *Europe:* Russia; *America:* USA (Hawaii island); *Asia:* Japan, China, Taiwan, Thailand, Myanmar, Indonesia, Malaysia [1, 2, and 12]; ***Vietnam:*** Dien Bien (Muong Nhe NR), Hoa Binh (Thuong Tien NR), Hai Phong (Cat Ba NP); Nghe An (Pù Mat NP, Pu Hoat NR), Quang Binh (Phong Nha – Ke Bang NP); Da Nang (Ba Na forest); Gia Lai (Kon Ka Kinh NP, Kon Chu Rang NR); Kon Tum (Thach Nham forest), Lam Dong (Langbian plateau); Ninh Thuan (Nui Chua NP), Dong Nai (Ma Da) [8, 11, 12, and 14-16].

Remark: This species also has a very wide distribution in Vietnam. The presence of 5-7 longitudinal keels on the tergites is a distinctive characteristic of *O. (O.) scaber*. Additionally, the specimens in this study showed that the on ventral of the prefemora of the last leg often has large rows of big spines, with the number of the spines varying from 2 to 4.

Genus *Scolopendra* Linnaeus, 1758

8. *Scolopendra dehaani* Brandt, 1840 (Fig 2F-G)

Material examined: 1 spm ♂ (VRTC.LG-XM.07), 11.58731ºN, 105.89082ºE, 23 m, broadleaf forest, 12 March 2024, col. Nguyen D. Hung; 1 spm ♀ (VRTC.LG-XM.12), 11.56895ºN, 105.9158ºE, 23 m, broadleaf forest, 13 March 2024, col. Nguyen D. Hung.; 1 spm ♀ (VRTC.LG-XM.67), 11.73398ºN, 106.68295ºE, 42 m, broadleaf forest, 23 July 2024, col. Le X. Son; 03 spms ♀ (VRTC.LG-XM.70; VRTC.LG-XM.71; VRTC.LG-

XM.72), 11.73394ºN, 106.68301ºE, 40 m, broadleaf forest, 23 July 2024, col. Le X. Son & Do T. Thinh; 1 spm ♂ (VRTC.LG-XM.73), 11.73400ºN, 106.68296ºE, 39 m, broadleaf forest, 23 July 2024, col. Le X. Son; 2 spms ♂ ♀ (VRTC.LG-XM.74; VRTC.LG-XM.75), 11.73402ºN, 106.68289ºE, 38 m, broadleaf forest, 23 July 2024, col. Le X. Son; 5 spms ♀ (VRTC.LG-XM.76; VRTC.LG-XM.77; VRTC.LG-XM.78; VRTC.LG-XM.79; VRTC.LG-XM.80; VRTC.LG-XM.81), broadleaf forest, 2023.

Distribution: ***America:*** Mexico; ***Asia:*** India, Bangladesh, Sri Lanka, China, Japan, Taiwan, Myanmar, Malaysia, Indonesia, Philippines, Thailand, Laos [1, 2, and 6]; ***Vietnam:*** Cao Bang (Phia Oac – Phia Den NP), Dien Bien (Muong Nhe NR), Son La (Ta Xua NR, Xuan Nha NR), Quang Ninh (Hon Gai; Ha Long); Nghe An (Vinh); Dak Lak (Ban Me Thuot); Gia Lai (Kon Chu Rang NR), Kon Tum; Ninh Thuan (Nui Chua NP), Ba Ria-Vung Tau (Con Dao Isl) [1, 9, 10, 12, 14, 15, and 17].

Remark: *S. dehaani* is one of the two largest species (along with *S. cataracta*) recorded in Vietnam, and it has a very wide distribution across the country. Due to its large size, it has become a target for hunting for various purposes, including medicine, food, and recreation.

9. *Scolopendra gracillima sternostriata* Schileyko, 1995 (Figures 2C-D)

Material examined: 1 spm ♀ (VRTC.LG-XM.41), 11.7364ºN, 106.05167ºE, 47m, broadleaf forest, 15 march 2024, col. Nguyen D. Hung; 1 spm ♀ (VRTC.LG-XM.46), 11.73727ºN, 106.05172ºE, 12m, broadleaf forest, 15 March 2024, col. Nguyen D. Hung.

Distribution: Lao Cai (Hoang Lien NP), Son La (Ta Xua NR), Hoa Binh (Thuong Tien NR), Hai Phong (Cat Ba NP); Quang Nam (Cu Lao Cham Island); Gia Lai Kon Tum (Thach Nham forest), (Kon Ha Nung Plateau); Lam Dong (Langbian Plateau) [10, 12, and 20].

Remark: *S. gracillima sternostriata* is only recorded in Vietnam and was first described by Schileyko (1995). Observations of the specimens in this study show that they completely fit the description provided by Schileyko (1995) [20].

10. *Scolopendra subspinipes* Leach, 1816 (Figures 2H-K)

Material examined: 2 spms (VRTC.LG-XM.48; VRTC.LG-XM.48.1), 11.58852ºN, 105.88689ºE, 11 m, broadleaf forest, 12 March 2024, col. Le X. Son.

Distribution: ***America:*** Colombia, Bermuda, Dominica ***Africa:*** Jamaica, Madagascar, Rodrigues, Mauritius, Seychelles, Comoros; ***Pacific Islands:*** South Pacific Islands, Tonga, Samoa, Tahiti, Hawaiian Islands, Marquesas Island; ***Europe:*** United Kingdom, Caribbean Sea; ***Asia:*** Singapore, Indonesia, Philippines, China, Japan, Korea, South Asia [6]; ***Vietnam:*** Dien Bien (Muong Nhe NR), Son La (Xuan Nha NR, Ta Xua NR), Hoa Binh (Thuong Tien NR), Lao Cai (Hoang Lien NP), Cao Bang (Phia Oac – Phia Den NP), Vinh Phuc (Tam Dao NP), Hanoi, Hai Phong (Cat Ba NP), Nghe An (Pu Mat NP), Quang Binh (Minh Hoa; Dong Hoi), Hue, Da Nang (Ba Na forest); Gia Lai (Kon Ka Kinh NP, Kon Chu Rang NR), Kon Tum (Thanh Nham forest), Dak Lak; Khanh Hoa (Hon Ba NR); Ninh Thuan (Nui Chua NP), Dong Nai (Cat Tien NP) [1, 2, 9-12, 15, 16, and 19].

Remark: *S. subspinipes* is also a big size with a wide distribution in Vietnam. This species exhibits significant color variation depending on the habitat, as reported in the studies by Attems (1930) and Siriwut (2016) [6, 12]. However, the two specimens recorded in this area show consistent coloration.

11. *Scolopendra morsitans* Linnaeus, 1758

Distribution: ***Africa:*** West Africa, South Atlantic Ocean, Tanzania, Tanganyika; ***South Pacific:*** Australia, Samoa, Fiji, Tahiti; ***Asia:*** Thailand, Cambodia, Laos, Myanmar, Brunei, Philippines, Indonesia, China, Japan, Indian and Middle Asian Territory [6]. ***Vietnam:*** Ha Giang; Quang Ninh (Bai Tu Long Archipelago); Nghe An (Vinh); Thua Thien Hue (Hai Van Pass); Dak Lak; Khanh Hoa (Dong Trang; Cau Da; Ninh Hoa; Ba Ngoi, Truong Sa Archioelago); Ninh Thuan (Phan Rang, Nui Chua); Lam Dong (Da Lat); Ba Ria – Vung Tau (Binh Chau); Tay Ninh (Tan Bien); Ca Mau [2, 13-14].

Remark: This species was previously recorded by Schileyko (2007) and Tran et al. (2013); however, in this study, we did not observe its presence [1-2].

4. CONCLUSION

A total of 11 species and subspecies belonging to 3 genera and 2 families of the order Scolopendromorpha have been recorded in Lo Go - Xa Mat NP, with *Scolopendra morsitans* not having any recorded specimens. The study results have added 9 species and subspecies to the centipede fauna of the area.

At the family level, the family Scolopendridae is dominant, with 9 species and subspecies, while the family Cryptopidae has only two recorded species. At the genus level, *Otostigmus* and *Scolopendra* are the most diverse, with 4 species and subspecies, followed by the genus *Cryptops* with two species. The genus *Alluropus* is represented by only one species.

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Conflict of Interest Statement: *The authors declare that they have no conflicts of interest related to the research, authorship, and publication of this article.*

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