



New data on some dobsonflies and fishflies (Megaloptera: Corydalidae) from Vietnam

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Abstract. Faunistic data of 29 species of Corydalidae recently collected in Vietnam, with special emphasis to the central and southern regions, are presented. The studied material allows a better definition of the distribution of these species in Vietnam.

Riassunto. Nuovi dati su alcuni Corydalinae e Chauliodinae (Megaloptera: Corydalidae) del Vietnam. Vengono presentati nuovi dati faunistici relativi a 29 specie di Corydalidae recentemente raccolti nel Vietnam, con particolare attenzione alle regioni centrali e meridionali. Il materiale studiato permette una migliore definizione della distribuzione di queste specie nel Vietnam.

Tóm tắt. Dữ liệu mới về một số loài dobsonflies và fishflies (Megaloptera: Corydalidae) từ Việt Nam. Dữ liệu khu hệ động vật của 29 loài họ Corydalidae mới được thu thập gần đây tại Việt Nam (đặc biệt chú trọng đến miền Trung và miền Nam) được trình bày. Vật liệu nghiên cứu cho phép xác định nghĩa rõ hơn về sự phân bố của các loài này ở Việt Nam.

Keywords. Corydalinae, Chauliodinae, Oriental realm

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Introduction

A dozen years ago, I published the results of a three years (2010–2012) field collections of Megaloptera in Northern Vietnam in the frame of a “Memorandum of Understanding” between the Vietnam National Museum of Nature, Hanoi and the Museum of Natural History, University of Florence conducted by Dr. Luca Bartolozzi and collaborators (LETARDI *et al.*, 2012). Since then, new researches have contributed to increasing knowledge regarding the distribution of these insects in Vietnam (LIU *et al.*, 2016, 2022, 2024; LIU & DOBOSZ, 2019); several further research expeditions promoted by the Museum of Natural History, University of Florence, allow new additional materials, expanding the research area in central and southern Vietnam; other data are derived from studies conducted in the Country by other research expeditions. This allows to provide an additional contribution to a better knowledge of Megaloptera from Vietnam.

Material and methods

In order to integrate the data presented in the previous work (LETARDI *et al.*, 2012), all the unpublished material relating to the family Corydalidae preserved at the museum of Florence is reported here with the relative acronym MZUF; additional material from the Florida State

Collection of Arthropods (FSCA) was made available by Dr David E. Bowles. The data on the tag are reported in full with the only addition (where missing) of the zoogeographic region (N for North, C for Central and S for South Vietnam). In addition to the determination, according to the world catalogue of OSWALD, 2024 with the integration of the recent changes for the genus *Protohermes* van der Weele, 1907 in LIU *et al.* (2024), the numbers of male and female specimens are reported (in two cases, where it was not possible to determine the gender, it was reported as “ex.”). Data are listed according to the three main zoogeographic subdivision of Vietnam, i.e. northern Vietnam (Bắc Bộ, Miền Bắc), central Vietnam (Trung Bộ, Miền Trung) and southern Vietnam (Nam Bộ, Miền Nam). The taxonomic arrangement presented here follows the recent comprehensive review of this insect order (LIU, 2019).

Results

CORYDALIDAE Leach in Brewster, 1815

CORYDALINAE Leach in Brewster, 1815

Protohermes van der Weele, 1907

P. annamitensis Liu, Tu & Hayashi, 2024

Examined material

C-Vietnam: Da Nang Province, Ba Na Hills, 1450 m a.s.l., V.2015, Thanh Luong Le leg.; 2 males. (FSCA)

Note

This species was recently described (Liu *et al.*, 2024), and reported till now only for Laos (Attapeu Province) and C-Vietnam (Kon Tum, Quang Nam, Thua Thien Hue Provinces).

P. differentialis (Yang & Yang, 1986)

Examined material

N-Vietnam, Vinh Phuc Province, Tam Dao, 985 m a.s.l., 29-30.IV.2012, J. Heppner leg.; 1 male. (FSCA)

P. lii Liu, Hayashi & Yang, 2007 (Fig. 1)

Examined material

N-Vietnam: Hoa Binh Province, Pa Co Hang Kia Nature Reserve, 900-1200 m a.s.l., 9-12.VI.2013, L. Bartolozzi, S. Bambi, F. Cianferoni, G. Mazza, E. Orbach leg.; 1 male and 1 female. (MZUF)

C-Vietnam: Thanh Hoa Prov. Ba Thuoc District, border Pu Luong Nature Reserve, 450 m a.s.l., at light, 20,447° N; 105,148° E, 16-19.VI.2018, A. Bandinelli, L. Bartolozzi, E. Orbach, S. Bambi, F. Fabiano, V. Sbordoni, L. Cecchi leg.; 2 females. (MZUF)

C-Vietnam: Nghe An Province, border of Pu Mat National Park, Khe Kem waterfall, 250 m a.s.l., at light, 18,965° N; 104,803° E, 13.VI.2018, A. Bandinelli, L. Bartolozzi, E. Orbach, S. Bambi, L. Cecchi, F. Fabiano, V. Sbordoni leg.; 2 males and 10 females. (MZUF)

C-Vietnam: Thua Thien Hue Province, Bach Ma Nature Reserve, surroundings of Hotel Morin, 1350-1400 m a.s.l., at light, 16,2° N; 107,85° E, 23-28.V.2014, L. Bartolozzi, G. Chelazzi, A. Bandinelli, S. Bambi, F. Fabiano leg.; 5 males and 4 females. (MZUF)

C-Vietnam: Thua Thien-Hue Province, A Luoi district, Sao La Nature Reserve, 600-650 m a.s.l., at light, 16,077° N; 107,488° E, 20-27.V.2017, L. Bartolozzi, E. Orbach, V. Sbordoni, S. Bambi, A. Bandinelli leg.; 4 males and 10 females. (MZUF)

C-Vietnam: Thua-Thien Hue Province, Sao La Nature Reserve, 600 m a.s.l., at light, 16,074° N; 107,496° E, 10.VI.2018, A. Bandinelli, L. Bartolozzi, E. Orbach, S. Bambi, L. Cecchi, F. Fabiano, V. Sbordoni leg.; 2 females. (MZUF)

C-Vietnam: Gai Lai Province, Kon Chu Rang Nature Reserve, about 15 km from HQ, 1100 m a.s.l., 14° 31,212' N; 108° 28,192' E, 12.V.2016, L. Bartolozzi, S. Bambi, A. Bandinelli, V. Sbordoni leg.; 1 male. (MZUF)

C-Vietnam: Gai Lai Province, Kon Chu Rang Nature Reserve, surroundings of HQ, about 900 m a.s.l., at light, 14°28,450' N; 108°32,401' E, 8-12.V.2016, L. Bartolozzi, A. Bandinelli, S. Bambi, V. Sbordoni leg.; 1 female. (MZUF)

C-Vietnam: Gai Lai Province, Kon Chu Rang Forest, 920 m a.s.l., 14°28'26.73"N; 108°32'23.60" E, 8.V.2016, V. Sbordoni leg.; 1 male. (MZUF)

C-Vietnam: Gia Lai Province, Kon Chu Rang Nature Reserve, 15 km from HQ, 1100 m a.s.l., at light, 14°31'13" N; 108°28'12" E, 27-28.V.2019, L. Bartolozzi, S. Bambi, A. Bandinelli, E. Orbach, leg.; 1 female. (MZUF)

C-Vietnam: Gia Lai Province, Kon Ka Kinh National Park, about 2 km from HQ, 860 m a.s.l., at light, 14°11'57" N; 108°18'31" E, 31.V-3.VI.2019, L. Bartolozzi, S. Bambi, A. Bandinelli, V. Sbordoni, E. Orbach, leg.; 1 female. (MZUF)

Note

This species is recorded in southeastern China and northern Vietnam till now (OSWALD, 2024).



Fig. 1. *Protohermes lii* Liu, Hayashi & Yang, 2007, habitus.

P. phani Liu, Tu & Hayashi, 2024

Examined material

S-Vietnam: Lam Dong Province, Lac Dulong District, Bidoup Nuiaba National Park, road up from Giang Ly Ranger Station (1600 m a.s.l.) 16-21.VI.2015, at light, L. Bartolozzi, G. Chelazzi, S. Bambi, F. Fabiano, E. Orbach, V. Sbordoni leg.; 4 males. (MZUF)

Note

Another male with the same label has been reported as paratype in Liu *et al.*, 2024.

P. sinuolatus Liu, Hayashi & Yang, 2009

Examined material

C-Vietnam: Tua Thien Hue Province, Bach Ma Nature Reserve, surroundings of Hotel Morin, 1350-1400 m a.s.l., at light, 16,2° N; 107,85° E, 23-28.V.2014, L. Bartolozzi, G. Chelazzi, A. Bandinelli, S. Bambi, F. Fabiano leg.; 5 males and 7 females. (MZUF)

C-Vietnam: Tua Thien Hue Province, Bach Ma Nature Reserve, 1400 m a.s.l., 16° 11' 11" N; 107° 50' 56" E, 24-27.V.2014, V. Sbordoni leg.; 1 male. (MZUF)

C-Vietnam: Giai Lai Province, Kon Chu Rang Nature Reserve, about 15 km from HQ, 1100 m a.s.l., 14° 31,212' N; 108° 28,192' E, 12.V.2016, L. Bartolozzi, S. Bambi, A. Bandinelli, V. Sbordoni leg.; 2 males and 1 female. (MZUF)

C-Vietnam: Da Nang Province, Ba Na Hills, 1450 m a.s.l., V.2015, Thanh Luong Le leg.; 1 female. (FSCA)

S-Vietnam: Lam Dong Province, Maria past., V.2016; 2 males and 4 females. Same label, but Da Lat; 1 male and 1 female. Same label, but VI.2016; 1 male. (FSCA)

P. tonkinensis (van der Weele, 1909)

Examined material

C-Vietnam: Thanh Hoa Province, surroundings of Thanh Lam village, c/o Pu Luong Nature Reserve, 700 m a.s.l., 20,478° N; 105,114° E, 17.VI.2018, A. Bandinelli, L. Bartolozzi, E. Orbach, S. Bambi, F. Fabiano, V. Sbordoni, L. Cecchi leg.; 1 female. (MZUF)

S-Vietnam: Lam Dong Province, Dambri, Bao Lam, IV.2015, Van leg.; 1 female. (FSCA)

P. yangi Liu, Hayashi & Yang, 2007

Examined material

C-Vietnam: Thua Thien-Hue Province, A Luoi district, Sao La Nature Reserve, 600-650 m a.s.l., at light, 16,077° N; 107,488° E, 20-27.V.2017, L. Bartolozzi, E. Orbach, V. Sbordoni, S. Bambi, A. Bandinelli leg.; 1 male and 1 female. (MZUF)

C-Vietnam: Thua-Thien Hue Province, Sao La Nature Reserve, 600 m a.s.l., at light, 16,074° N; 107,496 [sic 10,496]° E, 10.VI.2018, A. Bandinelli, L. Bartolozzi, E. Orbach, S. Bambi, L. Cecchi, F. Fabiano, V. Sbordoni leg.; 1 male and 1 female. (MZUF)

C-Vietnam: Thua-Thien Hue Province, Sao La Nature Reserve, 900 m a.s.l., at light, 16,106° N; 107,464° E, 11.VI.2018, A. Bandinelli, L. Bartolozzi, E. Orbach, S. Bambi, L. Cecchi, F. Fabiano, V. Sbordoni leg.; 1 male. (MZUF)

C-Vietnam: Giai Lai Province, Kon Chu Rang Nature Reserve, about 15 km from HQ, 1100 m a.s.l., 14° 31,212' N; 108° 28,192' E, 12.V.2016, L. Bartolozzi, S. Bambi, A. Bandinelli, V. Sbordoni leg.; 1 male. (MZUF)

C-Vietnam: Gia Lai Province, Kon Chu Rang Nature Reserve, 15 km from HQ, 1100 m a.s.l., at light, 14°31'13" N; 108°28'12" E, 27-28.V.2019, L. Bartolozzi, S. Bambi, A. Bandinelli, E. Orbach, leg.; 1 male and 3 females. (MZUF)

C-Vietnam: Kon Tum Province, Kon Plong District, surroundings of Mang Den, 1100 m a.s.l., 14°35'33,38" N; 108°16'40,83" E, [2019], L. Bartolozzi, A. Bandinelli, S. Bambi, V. Sbordoni, E. Orbach leg.; 1 male. (MZUF)

C-Vietnam: Da Nang Province, Ba Na Hills, 1450 m a.s.l., V.2015; 2 male and 1 female. (FSCA)

P. yunnanensis Yang & Yang, 1988

Examined material

S-Vietnam: Lam Dong Province, Lac Dulong District, Bidoup Nuiba National Park, road up from Giang Ly Ranger Station (1600 m a.s.l.) at light, 16-21.VI.2015, L. Bartolozzi, G. Chelazzi, S. Bambi, F. Fabiano, E. Orbach, V. Sbordoni leg.; 1 male and 1 female. (MZUF)

Neoneuromus van der Weele, 1907

N. coomani Lestage, 1927

Examined material

C-Vietnam: Kon Tum Province, forest surroundings of Mang Den, 1160 m a.s.l., 14° 35' 31.91" N; 108° 16' 51.81" E, 3.V.2016, V. Sbordoni leg.; 1 female. (MZUF)

C-Vietnam: Kon Tum Province, about 30 km from Kon Plong, at light, 1250 m a.s.l., 14° 40,320' N; 108° 15,829' E, 4-7.V.2016, L. Bartolozzi, S. Bambi, A. Bandinelli, V. Sbordoni leg.; 1 male. (MZUF)

N. ignobilis Navás, 1932

Examined material

C-Vietnam: Nghe An Province, border of Pu Mat National Park, Khe Kem waterfall, 250 m a.s.l., at light, 18,965° N; 104,803° E, 13.VI.2018, A. Bandinelli, L. Bartolozzi, E. Orbach, S. Bambi, L. Cecchi, F. Fabiano, V. Sbordoni leg.; 2 females. (MZUF)

C-Vietnam: Kontum Ngoc Linh, V.2015, Thanh Luong Le leg.; 1 male. (FSCA)

C-Vietnam: Kon Tum Province, W border of Ngoc Linh Natural Park, 20 km N Dak Glei, 900 m a.s.l., at light, 05°14'26,04" N; 107°44'11.61" E, 30.V.2014, L. Bartolozzi, G. Chelazzi, A. Bandinelli, S. Bambi, F. Fabiano leg.; 1 female. (MZUF)

C-Vietnam: Kon Tum Province, ca 30 km from Kon Plong, 1250 m a.s.l., at light, 14° 40,320' N; 108° 15,829' E, 4-7.V.2016, L. Bartolozzi, S. Bambi, A. Bandinelli, V. Sbordoni leg.; 2 males and 3 females. (MZUF)

C-Vietnam: Kon Tum Province, Kon Plong Forest, 1270 m a.s.l., 14° 40' 19.96" N; 108° 15' 51.26" E, 7.V.2016, V. Sbordoni leg.; 1 male and 2 females. (MZUF)

C-Vietnam: Kon Tum Province, forest surroundings of Mang Den, 1160 m a.s.l., 14° 35' 31.91" N; 108° 16' 51.81" E, 3.V.2016, V. Sbordoni leg.; 1 male. (MZUF)

C-Vietnam: Kon Tum Province, Kon Plong District, surroundings of Mang Den, 1100 m a.s.l., 14°35'33,38" N; 108°16'40,83" E, [2019], L. Bartolozzi, A. Bandinelli, S. Bambi, V. Sbordoni, E. Orbach, leg.; 1 male. (MZUF)

C-Vietnam: Tua Thien Hue Province, Bach Ma Nature Reserve, surroundings of Hotel Morin, 1350-1400 m a.s.l., at light, 16,2° N; 107,85° E, 23-28.V.2014, L. Bartolozzi, G. Chelazzi, A. Bandinelli, S. Bambi, F. Fabiano leg.; 11 females. (MZUF)

C-Vietnam: Tua Thien Hue Province, Bach Ma Nature Reserve, 1400 m a.s.l., 16° 11' 11" N; 107° 50' 56" E, 24-27.V.2014, V. Sbordoni leg.; 1 male. (MZUF)

C-Vietnam: Thua Thien-Hue Province, A Luoi district, Sao La Nature Reserve, 600-650 m a.s.l., at light, 16,077° N; 107,488° E, 20-27.V.2017, L. Bartolozzi, E. Orbach, V. Sbordoni, S. Bambi, A. Bandinelli leg.; 14 males and 9 females. (MZUF)

C-Vietnam: Thua-Thien Hue Province, Sao La Nature Reserve, 600 m a.s.l., at light, 16,074° N; 107,496° E, 10.VI.2018, A. Bandinelli, L. Bartolozzi, E. Orbach, S. Bambi, L. Cecchi, F. Fabiano, V. Sbordoni leg.; 4 males and 1 female. (MZUF)

C-Vietnam: Thua-Thien Hue Province, Sao La Nature Reserve, 900 m a.s.l., at light, 16,106° N; 107,464° E, 11.VI.2018, A. Bandinelli, L. Bartolozzi, E. Orbach, S. Bambi, L. Cecchi, F. Fabiano, V. Sbordoni leg.; 3 males and 2 females. (MZUF)

C-Vietnam: Giai Lai Province, Kon Chu Rang Nature Reserve, about 15 km from HQ, 1100 m a.s.l., 14° 31,212' N; 108° 28,192' E, 12.V.2016, L. Bartolozzi, S. Bambi, A. Bandinelli, V. Sbordoni leg.; 1 male. (MZUF)

C-Vietnam: Giai Lai Province, Kon Chu Rang Nature Reserve, surroundings of HQ, about 900 m a.s.l., at light, 14° 28,450' N; 108° 32,401' E, 8-12.V.2016, L. Bartolozzi, A. Bandinelli, S. Bambi, V. Sbordoni leg.; 1 male and 2 females. (MZUF)

C-Vietnam: Gia Lai Province, Kon Chu Rang Nature Reserve, 15 km from HQ, 1100 m a.s.l., at light, 14°31'13" N; 108°28'12" E, 27-28.V.2019, L. Bartolozzi, S. Bambi, A. Bandinelli, E. Orbach, leg.; 1 male and 3 females. (MZUF)

C-Vietnam: Gia Lai Province, Kon Ka Kinh National Park, about 2 km from HQ, 860 m a.s.l., at light, 14°11'57" N; 108°18'31" E, 31.V-3.VI.2019, L. Bartolozzi, S. Bambi, A. Bandinelli, V. Sbordoni, E. Orbach, leg.; 1 male and 5 females. (MZUF)

C-Vietnam: Da Nang Province, Ba Na Hills, 1450 m a.s.l., V.2015, Thanh Luong Le leg.; 1 male. (FSCA)

C-Vietnam: Da Lat, Lam Dong, V.2016.; 3 females. (FSCA)

S-Vietnam; Lam Dong Province, Da Lat, V.2015, Van leg.; 1 female. (FSCA)

S-Vietnam: Lam Dong Province, Lac Dulong District, Bidoup NuiBa National Park, road up from Giang Ly Ranger Station (1600 m a.s.l.) at light, 16-21.VI.2015, L. Bartolozzi, G. Chelazzi, S. Bambi, F. Fabiano, E. Orbach, V. Sbordoni leg.; 2 females. (MZUF)

N. maclachlani (van der Weele, 1907)

Examined material

N-Vietnam: Vinh Phuc Province, Tam Dao, 985 m a.s.l., 29-30.IV.2012, J. Heppner leg.; 1 female. (FSCA)

N. maculatus Liu, Hayashi & Yang, 2018 (Fig. 2)

Examined material

N-Vietnam: Vinh Phuc Province, Tam Dao, 985 m a.s.l., 29-30.IV.2012, J. Heppner leg.; 1 female (2 other females labelled generically "Vietnam"). (FSCA)

C-Vietnam: Tua Thien Hue Province, Bach Ma Nature Reserve, surroundings of Hotel Morin, 1350-1400 m a.s.l., at light, 16,2° N; 107,85° E, 23-28.V.2014, L. Bartolozzi, G. Chelazzi, A. Bandinelli, S. Bambi, F. Fabiano leg.; 1 male. (MZUF)

C-Vietnam: Tua Thien Hue Province, Bach Ma Nature Reserve, 1400 m a.s.l., 16° 11' 11" N; 107° 50' 56" E, 24-27.V.2014, V. Sbordoni leg.; 1 male. (MZUF)

C-Vietnam: Thua Thien-Hue Province, A Luoi District, Sao La Nature Reserve, 600-650 m a.s.l., at light, 16,077° N; 107,488° E, 20-27.V.2017, L. Bartolozzi, E. Orbach, V. Sbordoni, S. Bambi, A. Bandinelli leg.; 1 female. (MZUF)



Fig. 2. *Neoneuromus maculatus* Liu, Hayashi & Yang, 2018, habitus.

N. niger Liu, Hayashi & Yang, 2018

Examined material

C-Vietnam: Kon Tum Province, W border of Ngoc Linh Natural Park, 20 km N Dak Glei, 900 m a.s.l., at light, 05° 14' 26,04" N; 107° 44' 11,61" E, 30.V.2014, L. Bartolozzi, G. Chelazzi, A. Bandinelli, S. Bambi, F. Fabiano leg.; 1 male. (MZUF)

C-Vietnam: Tua Thien Hue Province, Bach Ma Nature Reserve, surroundings of Hotel Morin, 1350-1400 m a.s.l., at light, 16,2° N; 107,85° E, 23-28.V.2014, L. Bartolozzi, G. Chelazzi, A. Bandinelli, S. Bambi, F. Fabiano leg.; 1 male. (MZUF)

C-Vietnam: Giai Lai Province, Kon Chu Rang Nature Reserve, about 15 km from HQ, 1100 m a.s.l., 14° 31,212' N; 108° 28,192' E, 12.V.2016, L. Bartolozzi, S. Bambi, A. Bandinelli, V. Sbordononi leg.; 1 male. (MZUF)

C-Vietnam: Thua Thien-Hue Province, A Luoi District, Sao La Nature Reserve, 600-650 m a.s.l., at light, 16,077° N; 107,488° E, 20-27.V.2017, L. Bartolozzi, E. Orbach, V. Sbordononi, S. Bambi, A. Bandinelli leg.; 2 males. (MZUF)

N. orientalis Liu & Yang, 2004

Examined material

C-Vietnam: Gia Lai Province, Kon Ka Kinh National Park, about 2 km from HQ, 860 m., 14°11'57" N; 108°18'31" E, 31.V-3.VI.2019, L. Bartolozzi, S. Bambi, A. Bandinelli, V. Sbordononi, E. Orbach leg.; 5 females. (MZUF)

Note

This species is recorded in southeastern China and northern Vietnam till now (OSWALD, 2024).

N. tonkinensis (van der Weele, 1907)

Examined material

N-Vietnam, Vinh Phuc Province, Tam Dao, 985 m a.s.l., 29-30.IV.2012, J. Heppner leg.; 1 male. (FSCA)

Nevromus Rambur, 1842

N. exterior Navás, 1927 (Fig. 3)

Examined material

N-Vietnam: Tuyen Quang Province, Na Hang Nature Reserve, 150 m a.s.l., 5-7.VI.2013, L. Bartolozzi, S. Bambi, F. Cianferoni, G. Mazza, E. Orbach leg.; 1 female. (MZUF)

C-Vietnam: Giai Lai Province, Kon Chu Rang Nature Reserve, about 15 km from HQ, 1100 m a.s.l., 14° 31,212' N; 108° 28,192' E, 12.V.2016, L. Bartolozzi, S. Bambi, A. Bandinelli, V. Sbordononi leg.; 1 female. (MZUF)

C-Vietnam: Giai Lai Province, Kon Chu Rang Nature Reserve, surroundings of HQ, about 900 m a.s.l., at light, 14° 28,450' N; 108° 32,401' E, 8-12.V.2016, L. Bartolozzi, A. Bandinelli, S. Bambi, V. Sbordononi leg.; 2 females. (MZUF)

C-Vietnam: Giai Lai Province, Kon Chu Rang Forest, 960 m a.s.l., 14° 28' 46.48"N; 108° 32' 19.31" E, 11.V.2016, V. Sbordononi leg.; 2 females. (MZUF)

C-Vietnam: Gia Lai Province, Kon Chu Rang Nature Reserve, 15 km from HQ, 1100 m., at light, 14°31'13" N; 108°28'12" E, 27-28.V.2019, L. Bartolozzi, S. Bambi, A. Bandinelli, E. Orbach, leg.; 6 females. (MZUF)

C-Vietnam: Thanh Hoa Prov. Ba Thuoc District, border Pu Luong Nature Reserve, 450 m a.s.l., at light, 20,447° N; 105,148° E, 16-19.VI.2018, A. Bandinelli, L. Bartolozzi, E. Orbach, S. Bambi, F. Fabiano, V. Sbordononi, L. Cecchi leg.; 9 males and 5 females. (MZUF)

C-Vietnam: Kon Tum Province, Kon Plong District, surroundings of Mang Den, 1100 m a.s.l., 14°35'33,38" N; 108°16'40,83" E, [2019], L. Bartolozzi, A. Bandinelli, S. Bambi, V. Sbordononi, E. Orbach, leg.; 2 females. (MZUF)



Fig. 3. *Nevromus exterior* Navás, 1927, habitus.

***Acanthacorydalis* van der Weele, 1907**

A. cfr. asiatica (Wood-Mason, 1884)

Examined material

S-Vietnam: Lam Dong Province, Lac Durong District, Bidoup Nuiaba National Park, road up from Giang Ly Ranger Station (1600 m a.s.l.) 16-21.VI.2015, at light, L. Bartolozzi, G.

Chelazzi, S. Bambi, F. Fabiano, E. Orbach, V. Sbordoni leg.; 1 female. (MZUF)

S-Vietnam: Da Lat, Lam Dong, V.2016; 2 females. (FSCA)

Note

This is probably a new species that will be described in a future revision of the genus (LIU, pers. comm). *A. asiatica* is recorded in China, India, Myanmar and Thailand (OSWALD, 2024; LIU, pers. comm).

A. fruhstorferi van der Weele, 1907

Examined material

N-Vietnam: Lao Kai province, Hoang Lien Nat. Park, Sapa, Mt. Fansipan, 1500-2000 m a.s.l., 14.IV.2012, local collectors; 1 male. (MZUF)

Note

Species cited in southeastern China and northern Vietnam till now (OSWALD, 2024)

A. imperatrix Navás, 1917 (Fig. 4)

Examined material

C-Vietnam: Kontum Ngoc Linh, IV.2015, Thanh Luong Le leg.; 1 female. Same label but V.2016; 3 females. (FSCA)

S-Vietnam: Dak Nong, VI.2015; 1 male. (FSCA)



Fig. 4. *Acanthacorydalis imperatrix* Navás, 1927, habitus.

CHAULIODINAE Davis, 1903

Ctenochauliodes van der Weele, 1909

C. abnormis Yang & Yang, 1986 (Fig. 5)

Examined material

N-Vietnam: Vinh Phuc Province, Tam Dao National Park, 950 m a.s.l., 1-4.VI.2013, L. Bartolozzi, S. Bambi, F. Cianferoni, G. Mazza, E. Orbach leg.; 1 male and 2 females. (MZUF)



Fig. 5. *Ctenochauliodes abnormis* C.-k. Yang & D. Yang, 1986, habitus.

Neochauliodes van der Weele, 1909

N. bachmanus Liu, Hayashi & Yang, 2010

Examined material

C-Vietnam: Tua Thien Hue Province, Bach Ma Nature Reserve, surroundings of Hotel Morin, 1350-1400 m a.s.l., 16,2° N; 107,85° E, 23-28.V.2014, at light, L. Bartolozzi, G. Chelazzi, A. Bandinelli, S. Bambi, F. Fabiano leg.; 5 males. (MZUF)

C-Vietnam: Tua Thien Hue Province, Bach Ma Nature Reserve, 1400 m a.s.l., 16° 11' 11" N; 107° 50' 56" E, 24-27.V.2014, V. Sbordoni legit; 1 male. (MZUF)

C-Vietnam: Gia Lai Province, Kon Ka Kinh, V.2015, Van legit; 1 male. (FSCA)

N. bicuspidatus Liu & Yang, 2006

Examined material

N-Vietnam: Mucangchai, Yenbai Province, 1700 m a.s.l., V.2016; 3 males and 1 female. (FSCA)

N. confusus Liu, Hayashi & Yang, 2010

Examined material

C-Vietnam: Thua Thien-Hue Province, A Luoi district, Sao La Nature Reserve, 600-650 m a.s.l., at light, 16,077° N; 107,488° E, 20-27.V.2017, L. Bartolozzi, E. Orbach, V. Sbordoni, S. Bambi, A. Bandinelli leg.; 1 male. (MZUF)

Note

This species is reported in Oriental China and northern Vietnam till now (OSWALD, 2024).

N. formosanus (Okamoto, 1910)

Examined material

C-Vietnam: Gia Lai Province, Kon Ka Kinh National Park, about 2 km from HQ, 860 m a.s.l., at light, 14°11'57" N; 108°18'31" E, 31.V-3.VI.2019, L. Bartolozzi, S. Bambi, A. Bandinelli, V. Sbordoni, E. Orbach, leg.; 4 males. (MZUF)

C-Vietnam: Kon Tum Province, Kon Plong District, surroundings of Mang Den, 1100 m a.s.l., 14°35'33,38" N; 108°16'40,83" E, [2019], L. Bartolozzi, A. Bandinelli, S. Bambi, V. Sbordoni, E. Orbach, leg.; 1 male. (MZUF)

N. fraternus (McLachlan, 1869)

Examined material

C-Vietnam: Kon Tum Province, surroundings of Kon Plong, 1120 m a.s.l., 14° 37,350' N; 108° 17,651' E, 4-7.V.2016, L. Bartolozzi, S. Bambi, A. Bandinelli, V. Sbordoni leg.; 2 males. (MZUF)

C-Vietnam: Kon Tum Province, forest surroundings of Mang Den, 1160 m a.s.l., 14° 35' 31.91" N; 108° 16' 51.81" E, 3.V.2016, V. Sbordoni leg.; 1 male. (MZUF)

C-Vietnam: Gia Lai Province, Kon Chu Rang Nature Reserve, about 15 km from HQ, 1100 m a.s.l., 14° 31,212' N; 108° 28,192' E, 12.V.2016, L. Bartolozzi, S. Bambi, A. Bandinelli, V. Sbordoni leg.; 1 ex. (MZUF)

C-Vietnam: Thua-Thien Hue Province, Sao La Nature Reserve, 900 m a.s.l., at light, 16,106° N; 107,464° E, 11.VI.2018, A. Bandinelli, L. Bartolozzi, E. Orbach, S. Bambi, L. Cecchi, F. Fabiano, V. Sbordoni leg.; 1 male. (MZUF)

Note

This species is reported in southern China and northern Vietnam till now (OSWALD, 2024).

N. koreanus van der Weele, 1909

Examined material

N-Vietnam, Vinh Phuc Province, Tam Dao, 985 m a.s.l., 1-7.V.2002, J. Heppner leg.; 1 ex. (FSCA)

N. punctatolus Liu & Yang, 2006 (Fig. 6)

Examined material

N-Vietnam: Lao Cai Province, Sapa Mtn., 1600 m a.s.l., V.2015, Thanh Luong Le leg.; 1 female. (FSCA)

C-Vietnam: Kon Tum Province, surroundings of Kon Plong, 1120 m a.s.l., 14° 37,350' N; 108° 17,651' E, 4-7.V.2016, L. Bartolozzi, S. Bambi, A. Bandinelli, V. Sbordoni leg.; 1 female. (MZUF)

C-Vietnam: Da Lat, Lam Dong, V.2016.; 1 female. (FSCA)

S-Vietnam: Lam Dong Province, Lac Durong District, Bidoup Nui National Park, road up from Giang Ly Ranger Station (1600 m a.s.l.) 16-21.VI.2015, at light, L. Bartolozzi, G. Chelazzi, S. Bambi, F. Fabiano, E. Orbach, V. Sbordoni leg.; 3 males. (MZUF)

Note

This species is reported in Myanmar, southern China, northern Laos, northern Thailand, northwestern Vietnam till now (OSWALD, 2024); molecular data of specimens from S-Vietnam seems to suggest a different species (LIU, pers. comm).



Fig. 6. *Neochauliodes punctatolus* X.-y. Liu & D. Yang, 2006, habitus.

N. tamdoensis Liu, Hayashi & Yang, 2010

Examined material

N-Vietnam: Lao Cai Province, Sapa Mtn., 1600 m a.s.l., V.2015, Thanh Luong Le leg.; 1 female. (FSCA)

N. tonkinensis (van der Weele, 1907)

Examined material

N-Vietnam: Lao Kai province, Hoang Lien Nat. Park, Sapa, Tram Ton, Ranger Station, love waterfall, 1900 m a.s.l., 13.IV.2012, V. Sbordoni, M. Buttinelli leg.; 1 female. (MZUF)

N-Vietnam: Vinh Phuc Province, Tam Dao National Park, 950 m a.s.l., 1-4.VI.2013, L. Bartolozzi, S. Bambi, F. Cianferoni, G. Mazza, E. Orbach leg.; 3 males. (MZUF)

N. umbratus Kimmins, 1954

Examined material

N-Vietnam: Hoà Binh Province, Mai Chau District, Tan Son, 640 m a.s.l., 8.VI.2013, V. Sbordoni leg.; 1 female. (MZUF)

N-Vietnam: Vinh Phuc Province, Tam Dao National Park, 950 m a.s.l., 1-4.VI.2013, L. Bartolozzi, S. Bambi, F. Cianferoni, G. Mazza, E. Orbach leg.; 1 male. (MZUF)

N-Vietnam: Vinh Phuc Province, Tam Dao, 985 m a.s.l., 1-7.V.2012, J. Heppner leg.; 2 males. Same label but 29-30.VI.2012; 1 male and 2 females. (FSCA)

N-Vietnam: Vinh Phuc Province, Tam Dao (hill road site), 1160 m a.s.l., 16-19.VI.2008, J. Heppner leg.; 1 male. (FSCA)

N-Vietnam: Vinh Phuc Province, Me Linh Biol. Sta., Dai Lai, 100 m a.s.l., 20-22.IV.2015, J. Heppner leg.; 1 male. (FSCA)

Discussion

Despite a greater attention to the Megaloptera of the Indochinese area that has led to the publication of several recent studies, the focus on certain areas, as in the case of this study for central and southern Vietnam, provides interesting faunal data. Among the species reported in this study, six species are new to central Vietnam (i.e. *Protohermes lii*, *Neoneuromus orientalis*, *Acanthacorydalis fruhstorferi*, *Neochauliodes confusus*, *N. fraternus*, and *N. punctatulosus*), two of them also to southern Vietnam (i.e. *Acanthacorydalis fruhstorferi* and *Neochauliodes punctatulosus*), while one species (*Acanthacorydalis* cf. *asiatica*) is new to the fauna of Vietnam. Finally, the reported data extends the narrow distribution area of *Protohermes annamitensis* to the north. As confirmed by studies on Vietnamese Corydalidae in recent decades (not least the previous work on materials from the Museum of Natural History, University of Florence in LETARDI, 2012), research in this area continues to provide interesting faunal and taxonomic information: there is not an official checklist of Megaloptera of Vietnam but, indicatively, at the present day, 56 species were reported for this country (54 Corydalidae and 2 Sialidae) (OSWALD, 2024). It is hoped that such studies can continue in collaboration with local institutions.

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