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Hesperiidae of Vietnam, 15¹ New records of Hesperiidae from southern Vietnam (Lepidoptera, Hesperiidae)

by

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Summary: A total of 67 species is added to the list of Hesperiidae of southern Vietnam, 15 of them being new for the country as a whole. A new subspecies, *Pyroneura callineura natalia* subspec. nov. is described and illustrated. Taxonomic notes on certain species are presented.

Since the previous publication summarizing the knowledge of the Hesperiidae in the southern part of Vietnam (DEVYATKIN & MONASTYRSKII, 2000), several further localities have been visited by research expeditions and individual collectors.

The annotated list below is based predominantly on the material collected in the Cat Tien Nature Reserve in 2000 (no year is given for the label data in the list), which was most profoundly studied and proved to be very rich and diverse in terms of the butterfly fauna, and contains new records for the south of the country along with some taxonomic corrections made in view of the new data.

Although some of the areas concerned in this paper may be geographically attributed to the southern part of Central Vietnam (or Annam), they were not regarded in our previous publications dedicated to the northern and central areas of the country (Devyatkin & MONASTYRSKII, 1999, 2002), the new data thus being supplementary to those published before on the southern part of Vietnam (DEVYATKIN & MONASTYRSKII, 2000).

Collecting localities

Bi Doup – **Nui Ba** Nature Reserve, Lac Duong district, Lam Dong Province (12°00'–12°19' N, 108°21'–108°44' E).

Located on the Dalat plateau, the whole site lies above 1,400 m (the highest point, Mt. Bi Doup, reaching 2,287 m). The area represents two main forest types: coniferous forest, dominated by *Pinus kesiya* with smaller amounts of *P. merkusii*, and evergreen forest, further classified into lower montane, dominated by species of the Fagaceae and Lauraceae families (*Castanopsis indica, Lithocarpus* spp., *Quercus* spp., *Cinnamomum* spp. and *Litsea* spp.), and upper montane, characterized by the presence of the genera *Syzygium* and *Rhododendron*. The flora and fauna of the nature reserve exhibit high levels of endemism. Collectors: ALM, BXP (IV.2002).

For (14) see Devyatkin, A. L.: A new species of *Celaenorrhinus* Hübner, 1819 (Lepidoptera, Hesperiidae). – Atalanta 34 (1/2): 115–118.

Cat Tien Nature Reserve, Dong Nai, Lam Dong and Binh Phuoc Provinces (11°21'-11°48' _{N,} 107°10'-107°34' E).

The topography of the area varies greatly among the three sectors of the national park from the low, gentle hills of the lowlands of southern Vietnam (the Nam Cat Tien and Tay Cat Tien sectors) to the steep hills of the western extent of the Central Highlands (the Cat Loc sector), the highest elevation reaching 650 m.

The national park supports a great variety of habitat types, including primary and secondary lowland evergreen forest, primary and secondary lowland semi-deciduous forest, freshwater wetlands and open lakes and seasonally inundated grasslands, flooded forest and a range of secondary habitat types, including grassland and areas dominated by bamboo (BIRDLIFE INTERNATIONAL AND THE FOREST INVENTORY AND PLANNING INSTITUTE, 2001). Collectors: ALM, BHM, NTB, PQT (IV.-X.2000).

Lo Go Xa Mat (Lo Go Sa Mat) Nature Reserve, Tay Ninh Province (11°19'-11°40'N; 105°49'-105°59'E).

The Reserve is centred at the Vam Co river, with its minor tributaries, the altitudes reaching 20 m a.s. l. The area contains the single forested area in the province and supports a mosaic of lowland semi-deciduous forest, lowland deciduous forest and patches of lowland evergreen forest; the forest vegetation is dominated by *Dipterocarpus* spp. and *Anisoptera costata*. Collectors: ALM (X.-XI.2001).

U Minh Thuong Nature Reserve (Upper U Minh), An Minh and Vinh Thuan districts, Kien Giang Province (9°31'-9°40'N; 105°03'-105°08'E).

This area is located in the plain of the Mekong delta, 365 km SW Ho Chi Minh City. The elevations reach only a few metres above sea level. The area represents freshwater wetlands, comprising peatswamp forest (one of the last significant areas remaining in Vietnam), seasonally inundated grassland and open swamp; characterized by acid sulphate soils. The vegetation is dominated by *Melaleuca* (Myrthaceae), *Phragmites, Eleocharis, Typha* (Poaceae) and *Nymphaea* (Nymphaeaceae) species in different habitats. The area harbours a diversity of flora, including many rare and endemic species.

Collectors: BHM (X.-XI.2000).

Lung Ngoc Hoang Proposed Nature Reserve, Can Tho Province (9°41'–9°45' N, 105°39'– 105°43' E).

The territory of the Reserve is situated in the Mekong delta, an extensive network of canals running throughout the site. The vegetation is dominated by a *Melaleuca* forest (mostly plantations), as well as several patches of open swamp and grassland, the latter including some large areas of *Eleocharis dulcis* and *Cynodon dactylon*. Collectors: D. BERNAUDE (5.111.2001).

Con Dao National Park, Ba Ria – Vung Tau Province (8°37'-8°48' N, 106°32'-106°45'). The National Park is centred on the archipelago of 14 islands, the largest of which is Con Son,

located about 80 km off the coast of southern Vietnam. The topography of Con Son is dominated by a granite ridge (running from south-west to north-east) which shelters the bays on both sides from strong winds. The highest point, Mt. Thanh Gia, reaches 577 m. Con Son and many islands of the archipelago are extensively forested. An outstanding feature of Con Dao's flora is the 44 plant species being discovered for the first time on the islands and mostly named after the site, including *Dipterocarpus condorensis, llex condorensis, Pavetta condorensis* and *Psychotria condorensis.* The terrestrial forest supports also a number of bird and mammal species of conservation importance.

Collectors: ABR (IV.1966–1.1968) (the collection deposited in The Natural History Museum, London).

Principal collectors (in alphabetic order): ABR – A. Bedford Russell ALM – A. L. Monastyrskii BXP – Bui Xuan Phuong BHM – Bui Huu Manh NTB – Nguyen Tran Binh POT – Phan Quoc Tuan

Bibasis jaina margana FRUHSTORFER, 1911 Cat Tien, 24.l., 1 ♂ (BHM). First record from S. Vietnam; the distribution of this subspecies covers the area from C. Thailand, C. Laos and C. Vietnam to S. Burma.

Hasora anura anura de Niceville, 1889

Bi Doup – Nui Ba, 1300–1500 m, 21.–26.IV.2002, 7 33, 4 99 (ALM, BXP). This seems to be the southernmost record of the species; purple gloss on the underside is almost absent in South Vietnamese specimens, as in the Chinese ssp. *china* EVANS, 1949.

Hasora salanga (PLötz, 1885) Cat Tien, 27.1., 1 & (ALM). First record from Vietnam; otherwise distributed from S. Burma and S. Thailand to Borneo.

Choaspes subcaudata crawfurdi DISTANT, 1886

Cat Tien, 28.I., 1 ♂ (PQT); 29.I., 1 ♀ (ALM); 3.-5.V., 1 ♂ (ALM); 11.V., 1 ♂ (NTB); 20.V., 1 ♂ (ALM).

The species is found for the first time in S. Vietnam, being distributed as far to the north as to Cuc Phuong (Ninh Binh Province) and Oudomxay in N. Laos (OSADA et al., 1999).

Capila penicillatum (DE NICEVILLE, [1893])

Cat Tien, 3.-23.V., 10 33, 3 99 (ALM, BHM, NTB).

First record from S. Vietnam. The specimens are rather uniform in appearance and most close to ssp. *insularis* (JOICEY & TALBOT, 1921). As stated earlier (DEVYATKIN & MONASTYRSKII, 1999), the subspecific composition in this highly variable species can be clarified only upon the accumulation of material from different localities.

Lobocla liliana liliana (Аткілѕол, 1871) Bi Doup – Nui Ba, 1300–1500 m, 9.–26.IV.2002, 10 ♂♂ (ALM, BXP). First record of the nominate subspecies from Vietnam and the southernmost record in the overall distribution of the species. The ssp. *tonka* Evans, 1949, of which only the type is known (Ngai Tio, Tonkin), according to Evans (1949), is different in the male genitalia (the shape of uncus).

Celaenorrhinus leucocera (KOLLAR, [1844]) Cat Tien (loc. Bao Lam), 18.–19.V., 2 99 (ALM, NTB). First record from S. Vietnam, the species being distributed as far south as to Peninsular Thailand (PINRATANA, 1985).

Celaenorrhinus putra sanda Evans, 1941

Bi Doup - Nui Ba, 5.1V.2002, 1 ♂ (BXP).

This widely distributed species is found throughout the forested areas of North and Central Vietnam.

Celaenorrhinus asmara asmara (BUTLER, [1879])

Cat Tien, 22.I., 1 ♂ (BHM), 23.I., 1 ♂ (ALM); 24.IV., 1 ♂ (ALM); 25.IV., 1 ♀ (ALM); 22.V., 2 ♂♂ (ALM); Lo Go Xa Mat, 23.X., 1 ♂; 29.X.2001, 1 ♂, 1 ♀ (ALM).

The species was recorded from S. Vietnam (Trang Bom) by INOUE & KAWAZOE (1964) as ssp. *consertus* DE NICEVILLE, 1890; however, the appearance and genitalia illustrated in that paper are suggestive those of the nominate subspecies. The problems in the relations of the two taxa are discussed in the paper on North and Central Vietnam (DEVYATKIN & MONASTYRSKII, 2002).

Celaenorrhinus dhanada affinis Elwes & Edwards, 1897

Bi Doup – Nui Ba, 14., 16.IV.2002, 2 ♂♂ (BXP).

First record from Vietnam, representing the southernmost locality in the distribution of this subspecies; the subspecific composition of *C. dhanada* (MOORE, [1866]), established by EVANS (1949), requires a revision.

Celaenorrhinus vietnamicus Devyatkin, 1998

Bi Doup – Nui Ba, 1500 m, 6.IV.2002, 1 🕉 (ALM).

This record confirms the presence of the species in S. Vietnam, suggested earlier (DEVYATKIN & MONASTYRSKII, 1999) on the base of a photograph of *C. aurivittata* (MOORE, [1879]) in INOUE & KAWAZOE (1964).

Darpa striata minta Evans, 1949

Cat Tien, 12.II., 1 \circ (PQT); 19.V., 1 \circ (BHM) (Bao Lam); without date (2000), 1 \circ (BHM). First record from S. Vietnam, and this seems to be so far the southernmost in the distribution of this subspecies.

Pseudocoladenia dan dhyana (Fruhstorfer, 1909)

Cat Tien, 7.–8.II., 1 & (ALM); 17.V., 1 &, 1 ♀ (ALM, NTB); 18.V., 1 ♀ (BHM).

This subspecies is recorded from Vietnam for the first time, most of the territory being inhabited by the very common ssp. *fabia* EVANS, 1949. There are constant differences between the two subspecies in appearance (and genitalia), which may be suspected to be of species level, since the distributions of both taxa overlap in Thailand (Chiang Mai) (PINRATANA, 1985). In general, the subspecific relations established by EVANS (1949) in the *P. dan*-complex apparently reauire a revision.

Coladenia agnioides Elwes & Edwards, 1897

Cat Tien, 27.I., 1 & (PQT); (no label) [Cat Tien, 2000], 1 &. First record from S. Vietnam, the species being so far known from a few localities in the northern and central areas (Cuc Phuong, Vu Quang, Phong Dien).

Gerosis sinica narada (Moore, 1884)

Cat Tien (Vill. No. 5), 11.V., 1 9 (NTB).

First record from S. Vietnam, the only other two Vietnamese specimens being known from the north of the country (Devyatkin & MONASTYRSKII, 2002)

Gerosis phisara phisara (MOORE, 1884)

Cat Tien, 11.V., 1 & (BHM).

Ngoc Linh (Kon Tum Province) was so far the southernmost locality in the distribution of this species in Vietnam.

Gerosis limax dirae (DE NICEVILLE, 1895)

Cat Tien (loc. Bao Lam), 18.V., 1 9 (ALM).

First record from Vietnam. A southern species, distributed as far north as to S. Laos (OsADA et al., 1999).

Tagiades gana meetana Moore, [1879]

Ma Da (ca. 60 km E Ho Chi Minh City), 19.XI.1990, 1 \bigcirc (N. V. BELYAEVA); Cat Tien, 9.–11.XII. 1990, 1 \eth , 1 \bigcirc (N. V. BELYAEVA); U Minh Thuong, 23.X., 2.XI., 8.XI.2000, 2 \eth , 2 \bigcirc (BHM). All the specimens at our disposal seem to represent this subspecies, although the photographs of the specimens from S. Vietnam in INOUE & KAWAZOE (1965), given under the name *T. gana gana* (MOORE, [1866]), are more suggestive of the ssp. sangarava FRUHSTORFER, 1910, both in fact widely intergrading. The nominate subspecies differs from other continental subspecies in the pure white hindwing tornal area, being in this respect similar to *T. parra* FRUHSTORFER, 1910; whatever status it may have within the *gana*-complex, it is not likely to be found in Vietnam, since its northernmost record comes so far from Peninsular Thailand (PINRATANA, 1985).

Tagiades menaka menaka (MOORE, [1866]) Cat Tien, 27.VI., 1 ♂ (BHM). First record from S.Vietnam.

Mooreana trichoneura pralaya (MOORE, [1866]) Cat Tien. 24.V., 1 ♂ (NTB). First record from S. Vietnam.

Halpe zola zola Evans, 1937 Cat Tien, 27.1., 2 ♂♂, 1 ♀ (ALM, PQT); 29.1., 1 ♂ (PQT); 9.V., 1 ♂ (ALM); 19.V., 1 ♀ (ALM); 20.V., 1 ♂ (ALM). First record from S. Vietnam.

Halpe kusala Fruhstorfer, 1911

Cat Tien, 7.V., 1 σ (ALM) (1882); Lo Go Xa Mat, 24.X.-4.XI.2001, 3 $\sigma\sigma$, 1 \circ (ALM). This seems to be the first documented record of this species from Vietnam since its description from S. Annam (Xom-Gom); the distribution extends from the Malay Peninsula as far north as to the northern part of Laos (OSADA et al., 1999).

Halpe flava Evans, 1926

Cat Tien, 3.–5.V., 1 3, 1 9 (ALM); 18.V., 1 3 (ALM); 30.VI., 1 3 (BHM). First record from Vietnam; like the previous species, found in the northern part of Laos (Os_{ADA} et al., 1999) but distributed further south, to Borneo.

Halpe pelethronix pagaia Evans, 1932

Cat Tien, 27.I., 1 ở (ВНМ); 3.–19.V., 12 ởở (АLМ, ВНМ, NTВ); 2.X., 1 ở (ВНМ). First record from S. Vietnam, the only other Vietnamese specimen being known from Gia Lai Province (Devyatкin & Момаsтукsкii, 2002).

Halpe wantona SwiNHOE, 1893 Cat Tien, 3.-5.V., 1 ♂ (ALM). First record from S. Vietnam.

Halpe veluvana brevicornis EVANS, 1932 Cat Tien, 7.–8.II., 1 ♂ (ALM) ; 3.–9.V., 3 ♂♂ (ALM, BHM); 29.VI., 3 ♂♂ (BHM); 13. VII., 1 ♂ (BHM). First record from Vietnam; this subspecies is distributed from Burma and N. Laos to Borneo.

Pithauria stramineipennis Wood-Mason & DE NICEVILLE, [1887] Cat Tien, 3.–5.V., 1 ♂ (ALM); 19.V., 2 ♂♂ (NTB; BHM). First record from S. Vietnam.

Stimula swinhoei swinhoei (ELWES & EDWARDS, 1897) Bi Doup – Nui Ba, 1300–1500 m, 6., 8.IV.2002, 2 ♀♀ (ALM, BXP). First record from S. Vietnam.

Scobura phiditia (HEWITSON, [1866]) Cat Tien, 19.V., 1 ở (BHM) (loc. Bao Lam); 13.VII., 1 ở (BHM). First record from S. Vietnam, only a few other specimens being known from the northern and central areas of the country (DEVYATKIN & MONASTYRSKII, 2002)

Scobura isota (SWINHOE, 1893) Cat Tien (loc. Dinh Vu), 3.–5.V., 1 ♂ (ALM). First record from S. Vietnam; so far has been known from the north.

Suada albolineata Devyatkin, 2000

Cat Tien, 29.I., 1 ightharpoondown (BHM); 29.VI., 1 ightharpoondown (BHM). This species seems to be widely distributed in N. and C. Vietnam, and now it is recorded from the south (the Cat Tien material being mentioned without detail in a previous publication (DEVYATKIN & MONASTYRSKII, 2002)), its distribution thus overlapping with that of its close relative, S. swerga (DE NICEVULLE, 1884).

Hyarotis iadera (DE NICEVILLE, 1895) Cat Tien, 19.1., 1 J (ALM). Found in Vietnam for the first time; the general distribution is from C. Thailand to Sundaland and the Philippines.

Quedara monteithi monteithi (WOOD-MASON & DE NICEVILLE, [1887]) Cat Tien, 18.1., 1 & (BHM). First record from Vietnam; distributed from Assam through Indo-China and Sundaland to the Philippines.

Quedara albifascia (MOORE, [1879])

Cat Tien (loc. Dinh Vu), 3.–5.V., 1 $\vec{\sigma}$ (ALM).

First record from Vietnam; the species seems to have a restricted distribution in Indo-China, being also known from S. Burma and the northern part of Laos (OsADA et al., 1999).

Isma bononia idyalis de Niceville, 1897

Cat Tien, 29.VI., 1 & (BHM).

With this record, the species seems to be distributed locally over the whole territory of Vietnam (DEVYATKIN & MONASTYRSKII, 2002); the question about its subspecific composition still remains open, since the Vietnamese specimens display a rather great variation in size and spot pattern. Recorded from C. Laos (OSADA et al., 1999), without subspecific identification.

Plastingia naga (DE NICEVILLLE, [1884])

Lo Go Xa Mat, 23.X.2001, 1 ♂ (ALM).

This species has been so far known only from the north of Vietnam (Devyatkin & Monastyrskii, 1999); found in S. Laos (Osada et al., 1999).

Pyroneura callineura (C. & R. Felder, [1867])

This species has so far never been recorded from Vietnam, being distributed from S. Burma to the Greater Sunda Islands. After the revision by ELIOT (1967) several former subspecies of *P. callineura* were given species rank and a new species, *P. agnesia* ELIOT, 1967, was described. Of the subspecies remaining within the *P. callineura* proper, ssp. *donatana* ELIOT, 1967, from S. Burma, may theoretically be found in Vietnam. However, our specimens from Cat Tien are rather different from all known taxa of this group and definitely represent a new taxon, which is described below.

Pyroneura callineura **natalia** subspec. nov. (colour plate Xc, figs. 1, 2)

Holotype &: Cat Tien (loc. Vill. No. 5), 10.V.2000 (ALM). Paratypes (2 &&, 1 \$\varphi): 1 \$\varphi, Cat Tien (loc. Dinh Vu), 3.–5.V., (ALM); 1 &, Cat Tien (loc. Bao Lam), 18.V., (BHM); 1 &, Cat Tien (loc. Cat Loc), 20.IX., (BHM). Externally, this interesting insect somewhat combines the characters of *P. callineura callineura* (C. & R. FELDER, [1867]) and *P. agnesia* (ELIOT, 1967), being closer to the former in the overall coloration and differing from both in the totally yellow antennae; some characters relate it also to *P. derna* (EVANS, 1941).

Description

Male

Antennal shaft and club pale yellow. Fore tibiae with yellow hairs, tarsus bare.

Upperside (col. pl. Xc, fig. 1). Forewing: costal yellow streak narrow, confined to space 11 (?); lower yellow area restricted to space 1b, with only few yellow scales in space 1a; spots in spaces 6 and 7 directed to the upper half of termen; cell spots widely separated, as in *P. agnesia* or *P. derna*; spots in spaces 2 and 3 hardly overlap, as in *P. derna*. Hindwing: yellow discal spots in spaces 2–5 rather large, half hyaline (as in *P. agnesia* or *P. derna*).

Underside (col. pl. Xc, fig. 2). General coloration of veins reddish with an orange tint, as in *P. c. callineura*. Forewing: costal area and veins rather pale reddish, as in *P. c. callineura*, this colour extending along terminal margin; all spots hyaline; an opalescent bluish spot over upper cell spot. Hindwing: (vein 8 scaled red on both sides); general pattern of basal and discal spots as in *P. c. callineura* but spot in space 6 reduced; spots in spaces 1c, 2 and 3 arranged in a straight line, the former being yellow shaded (both characters as in *P. agnesia*). Length of forewing 19–19.5 mm.

Female. Similar to male, wings broader; forewing costal stripe almost obscure. Length of forewing 20.5 mm.

Male genitalia (fig. 1).

In the main features, the male genitalia are quite characteristic for the *P. callineura*-group; distal processes of the clasp rather long and serrate, most of all resembling those of *P. agnesia*.

Female genitalia (fig. 2).

Antevaginal plate wide, of a complex shape; lateral lobes distally produced and rounded; strong wing-like folds between the lateral lobes and the median third; the latter distally excavate at the middle, with 3 straight and faint longitudinal folds. Postvaginal plate strongly transversal, short and very broad, excavate at the middle of the distal side. Antrum short and narrow, weakly sclerotized, parallel-sided; ductus bursae and bursa copulatrix membranous.

Discussion

The new subspecies differs from the nominate one in the forewing spots in spaces 6–7 directed to upper termen and in the reduced bluish spot in space 6, as well as in the straight-line arranged submarginal spots on the hindwing underside; from continental ssp. *donatana* ELIOT, 1967 it differs sharply in the short and narrow yellow costal streak on the forewing upperside and in the broad hyaline band on the hindwing underside; in male genitalia, the long distal processes of the clasp are very different from the short ones in ssp. *donatana*. The female genitalia are in general similar to those of *P. margherita miriam* (EVANS, 1941), but the external characters of the butterfly are very different.

The above description of the new subspecies points to its relations in some respects to other taxa of the species level in the *callineura*-group; taking into account the endemic trends within the group, it may prove to be a separate species upon a profound taxonomic revision based on new material.



Fig. 1: *Pyroneura callineura natalia* subspec. nov., holotype $\vec{\sigma}$, male genitalia (A – left clasp, inner view; B – dorsal process of cuiller, enlarged).

Fig. 2: Pyroneura callineura natalia subspec. nov., paratype Q, female genitalia, ventral view (without papillae anales and bursa copulatrix).

Erionota sybirita (Hewitson, 1876)

Cat Tien, 24.V., 1 3 (ALM).

First record from Vietnam; distributed from S. Burma and S. Thailand to Borneo and the Philippines.

Matapa druna (MOORE, [1866])

Cat Tien (loc. Bao Lam), 19.V., 2 강장 (BHM); Cat Tien (loc. Cat Loc), 29.VI., 1 장 (BHM); [Cat Tien], without label, 1 장.

First record from S. Vietnam; rather uncommon all over the country.

Matapa cresta Evans, 1949 Cat Tien (loc. Dinh Vu), 3.–5.V., 1 δ (ALM). First record from S. Vietnam.

Acerbas anthea pista Evans, 1949

Cat Tien (loc. Dinh Vu), 3.–5.V., 1 σ (BHM).

First record from Vietnam; the species is distributed from Burma and S. Thailand to Sundaland and the Philippines.

Taractrocera archias quinta Swinhoe, 1913

Cat Tien, 28.I.–14.II., 4 ♂♂, 2 ♀♀ (BHM, PQT); 10.–11.V., 2 ♂♂ (BHM, NTB); Saigon, 15.V.– 26.VIII.1966, 8 specimens (ABR).

Known from C. Vietnam, the subspecies being distributed from Burma and Thailand to the $\ensuremath{\mathsf{Ma}}$ lay Peninsula.

Taractrocera nigrolimbata (SNELLEN, 1876)

A single male was reported from Saigon by Evans (1949) (as *T. aliena aliena* PLÖTZ). For the nomenclature of this species see de JONG (1991).

Taractrocera maevius sagara (Мооке, [1866]) Saigon, 7.VIII., 4.XI., 5.XI.1966, 2 ♂♂, 1 ♀ (ABR) First documented record from Vietnam, although mentioned earlier without detail (Devyatkin & Monastyrskii, 1999).

Taractrocera ceramas atropunctata WATSON, 1897

Dalat, 5-6000', 26.VIII.1966, 6 specimens (ABR).

First record from Vietnam, the subspecies being so far known from Assam and N. Burma. The precise status of the Vietnamese specimens needs further clarification.

Oriens goloides (MOORE, [1881])

Cat Tien, 16.I., 1 ♂ (ALM); 23.I., 1 ♀ (BHM); Cat Tien (loc. Bao Lam), 17.V., 1 ♀ (NTB); 19.V., 1 ♂ (ALM).

First record from S. Vietnam; this widely distributed species was only recently found in N. Vietnam (Devyatkin & Monastyrskii, 2002).

Potanthus rectifasciata (ELWES & EDWARDS, 1897)

Cat Tien, 27.-29.I., 4 ඊඊ (ALM, PQT).

The species is distributed from Sikkim to the Malay Peninsula; in Vietnam it was found so far only in Gia Lai Province (DEVYATKIN & MONASTYRSKII, 2002).

Potanthus juno juno (Evans, 1932)

Cat Tien, 9.–10.II., 1 ♂, 1 ♀ (BHM); Lo Go Xa Mat, 31.X.2001, 1 ♂ (ALM).

This is the first record of this species from S. Vietnam, a few female specimens being so far known from the northern and central provinces of the country (DEVYATKIN & MONASTYRSKII, 2002).

Potanthus omaha omaha (Edwards, 1863) Saigon, 8., 22.1.1967, 2 ♂♂ (ABR) First record from S. Vietnam.

Potanthus confucius dushta (FRUHSTORFER, 1911)

Thu Duc, 5.VI.1966; Saigon, 12.II.1967; Vung Tau, 11.X.1966; 15.I.1967; 2.VIII.1967; Phu Quoc Is., 13.I.1967 (6 specimens, all ABR).

This series represents the southernmost localities of the species in Vietnam, being previously known from Annam (DEVYATKIN & MONASTYRSKII, 2000), although the distribution of ssp. *dushta* extends to the Sunda Islands.

Potanthus palnia palnia (Evans, 1914) Bi Doup – Nui Ba, 15.IV.2002, 1 ♂ (BXP). This seems to be the southernmost locality for this species in Indo-China.

Telicota linna Evans, 1949

Cot Tien, 20.I., & (ALM); 2.X., 1 & (BHM).

First record from S. Vietnam; together with the recent record from C. Vietnam (\mathcal{S} , Thanh Hoa Prov., Xuan Lien Proposed Nature Reserve, 31.X.1998, ALM leg.), the distribution area of the species appears to cover the whole territory of the country.

Telicota bambusae bambusae (MOORE, 1878)

Saigon, 29.V., 11.VI.1966; 15.I.1967; 27.I.1968; Thu Duc, 31.XII.1966; Vung Tau, 15.I., 9.II.1967 (ABR).

First record from S. Vietnam. The relations of the taxon *bambusae* with other taxa of the *T. ancilla* (HERRICH-SCHÄFFER, 1869)-group need clarification.

Telicota ohara jix Evʌns, 1949 Bi Doup – Nui Ba, 1300 m, 13.IV.2002, 1 ♀ (ALM); Dalat, 5–6000', 26.–30.VIII.1966, 4 ♂♂ (ABR). First record from S. Vietnam.

Cephrenes acalle oceanica (MABILLE, 1904) Saigon, 8.I., 3.IX., 26.XII.1967 (ABR). First record of this widespread species from S. Vietnam.

Parnara guttata (Вкемек & Grey, 1853)

Dalat, 5-6000', 26., 29.VIII.1966, 2 ♂♂ (ABR).

First record from S. Vietnam; this seems to be the southernmost record in the overall distribution of the species, leaving aside the possible relations between the subspecies.

Parnara apostata (SNELLEN, 1886)

Cat Tien, 10.V., 1 ♂ (ALM); Can Tho, 5.III.2001, 1 ♂ (D. BERNAUDE).

First record from S. Vietnam; the southern specimens, although insufficient to make a f_{ingl} conclusion, seem to be more close in appearance to the nominate subspecies than to the northern ssp. *hulsei* DEVYATKIN, 1999.

Pseudoborbo bevani (Moore, 1878) Dalat, 5–6000', 28.VIII.1966, 1 ♂ (ABR). First record from S. Vietnam.

Pelopidas subochracea subochracea (MOORE, 1878)

Dalat, 5–6000', 29.VIII.1966, 2 ♂♂ (ABR).; Lo Go Xa Mat, 21.XI., 28.XI.2002, 2 ♂♂ (ALM). First record from Vietnam; the species is known from Hong Kong, Yunnan, Hainan, Burma and Thailand.

The Vietnamese specimens show some transition to ssp. *barneyi* (EVANS, 1937) in the respect of the hindwing underside spotting pattern.

Pelopidas mathias mathias (FABRICIUS, 1798)

Dalat, 5–6000', 18. and 26.VIII.1966, 2 ਰੱਤੋਂ; Saigon, 29.V., 24.VI.1966, 2 ਰੱਤੋਂ; 13.XII.1966, 1 ç; Con Dao (Con Son Is.), 18.III., 9.VII., 16.IX.–29.XII.1967, 4 ਰੱਤੋਂ (all ABR).

First record from S. Vietnam and first documented record from the country as a whole. Problems with literature records of this species have been discussed earlier (DEVYATKIN & MONAS-TYRSKII, 1999).

Polytremis discreta discreta (ELWES & EDWARDS, 1897) Bi Doup – Nui Ba, 1300–1500 m, 6.–26.IV.2002, 3 ♂♂ 1 ♀ (ALM, BXP). First record from S. Vietnam.

Polytremis eltola eltola (Неwптоол, [1869]) Dalat, 5–6000', 29.VIII.1966, & (ABR); Bi Doup – Nui Ba, Mt. Bi Doup I, 2000 m, 16., 17.IV. 2002, 2 & (ALM). First record from S. Vietnam.

Polytremis lubricans lubricans (HERRICH-SCHÄFFER, 1869) Cat Tien, 16.I.–18.II., 5 ♂♂, 1 ♀ (ALM, BHM, PQT); 25.IV.–22.V., 8 ♂♂, 2 ♀♀ (ALM, BHM); Lo Go Xa Mat, 20.X., 1 ♂; 3.XI.2001, 1 ♀ (both ALM). The species is recorded from S. Vietnam for the first time, thus being common in secondary habitats all over the country.

Polytremis annama Evans, 1937 Cat Tien, 9.II., 1 ♀ (ALM). First record from S. Vietnam; apart from the type locality (the area of Nha Trang), only a few specimens have been found in Indo-China (DEVYATKIN & MONASTYRSKII, 1999).

Baoris oceia (ΗεωιτsοΝ, [1868]) Cat Tien, 7.–8.II., 1 ♂ (BHM). First record from Vietnam; distributed from S. Burma to the Philippines and Sundaland. Baoris farri farri (MOORE, 1878) Cot Tien, 16.1.–9.11., 7 ਨੱਟੋ, 2 ♀♀ (ALM, PQT); 8.V., 1 ਨੇ (ALM); Saigon, 20.XI.1966; 4.111., 22.X., 4.XII.1967 (ABR); Lo Go Xa Mat, 24.X.–4.XI.2001, 3 ਨੇਟੇ (ALM). This species, very common in N. and C. Vietnam, is for the first time recorded from the south of the country.

Caltoris brunnea caere (DE NICEVILLE, 1891) Cat Tien, 28.1., 1 ♂, 3 ♀♀ (ALM, BHM, PQT); 4., 9.11., 1 ♂, 2 ♀♀ (ALM). First record of this widespread species from S. Vietnam.

Caltoris cahira austeni (MOORE, [1884]) Cat Tien (loc. Bao Lam), 17.V., 1 & (BHM). First record from S. Vietnam.

Caltoris cormasa (HEWITSON, 1876) Cat Tien, 27.1., 1 ♂; 2.11., 1 ♀ (both ALM); 28.VI., 1 ♂ (BHM); Saigon, 20.XI., 31.XII.1966; 4.III., 22.X., 4.XII.1967 (all ABR); U Minh Thuong, 9.XI. 2000, 1 ♂ (BHM). First record from S. Vietnam, thus being found locally all over the country.

Caltoris tulsi tulsi (DE NICEVILLE, [1884]) Cat Tien, 11.V., 1 σ (BHM). This rather widespread species has so far been recorded only from the north of the country.

Iton semamora semamora (MOORE, [1866])

Cat Tien, 18.V., 3 🖧 (BHM, NTB).

First record from S. Vietnam; together with the records from N. and C. Vietnam (Bac Can and Thanh Hoa Provinces), the distribution of this species, ranging from Sikkim to Borneo, seems to cover the whole country.

Discussion

With the above records, the total number of species known from southern Vietnam exceeds 150; most of them have already been found in the northern and central areas of the country. As it was expected, the majority of new records came from the area of the South Annam mountains in Lam Dong and the adjacent foothills of Dong Nai. This area proves to be the southern limit for a number of northern-oriented species of Sino-Himalayan origin: *Hasora anura* DE NICEV., *Capila penicillatum* DE NICEV., *Lobocla liliana* ATKINSON, *Taractrocera ceramas* HEW., *Parnara guttata* BREM. & GREY, *Pelopidas subochracea* MR. For another kind of species, this area seems to be a subspecific boundary, representing the southernmost limit of the northern subspecies, like *Celaenorrhinus dhanada affinis* ELW. & EDW., *Darpa striata minta* EVANS, *Pseudocoladenia dan fabia* EVANS, *Potanthus palnia* palnia EVANS, *Polytremis eltola eltola* HEW. In some of these cases, the relations between the formal subspecies apparently require a revision.

At the same time, the hilly and low-mountain area of southern Lam Dong and northern Dong Nai seems to be the northern limit for the southern (Malayan) fauna, as it can be seen from the northernmost records of *Gerosis limax* PLÖTZ, *Pyroneura callineura* C. & R. FELDER, *Erionota sybirita* HEW., *Taractrocera nigrolimbata* SNELLEN, *Baoris oceia* HEW. This impression is emphasized by the presence of a further number of southern-oriented species (*Hasora salanga* PLÖTZ, *Halpe kusala* FRUHST., *H. flava* EVANS, *H. pelethronix pagaia* EVANS, *H. veluvana brevicornis* EVANS, *H. yarotis iadera* DE NICEV., *Acerbas anthea pista* EVANS), which have the northern limit of their distribution in Central Vietnam.

Species status is highly probable for some of the taxa concerned (e.g., *Celaenorrhinus asmara asmara BTLR*. and *C. asmara consertus DE NICEV., Pseudocoladenia dan fabia EVANS* and *P. dan dhyana FRUHST.*), this depending on further material and possible sympatric records.

Along with this, a clear trend of endemicity can be traced in this boundary montane area, confirmed by the description of the very peculiar *Pyroneura callineura natalia* subspec. nov. and descriptions of new taxa of species and subspecies level in other families (*Chilasa imitata* MONASTYRSKII & DEVYATKIN, 2003, *Delias vietnamensis* MONASTYRSKII & DEVYATKIN, 2000, *Ethope diademoides metayei* MONASTYRSKII & DEVYATKIN, 2003, *Neptis armandia morrisi* MONASTYRSKII & DEVYATKIN, 2003, *Dodona speciosa* MONASTYRSKII & DEVYATKIN, 2000, etc.).

Thus, all the above considerations lead to the conclusion that further new records of Hesperiidae, both on the species and subspecies level, should be expected from the southern part of Vietnam, especially from the mountainous areas of South Annam.

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Explanation of colour plate Xc (p. 273):

Fig. 1: *Pyroneura callineura natalia* subspec. nov., holotype δ, Cat Tien Nature Reserve, 10.V. 2001, A. L.MONASTYRSKII leg., upperside. Fig. 2: Id., underside.



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Colour plate Xa

DEVYATKIN, A. L.: Hesperiidae of Vietnam, 13. A new species and a new subspecies of *Potanthus* Scudder, 1872 from Vietnam and Burma (Lepidoptera, Hesperiidae). – Atalanta **34** (1/2): 111–114.

Fig. 1: *Potanthus tibetana laocai* subspec. nov., holotype & North Vietnam, Lao Cai Province, Hoang Lien Nature Reserve, 2.VIII.1998, FRON-TIER leg. (F.T.V.), upperside.

Fig. 2: Id., underside.

Fig. 3: *Potanthus eugenius* spec. nov., holotype ♂. North Burma, Cachin State, Indawgyi Lake, 400 m, 25.111.1997, E. TARASOV leg., upperside. Fig. 4: Id., underside.

Colour plate Xb

DEVYATKIN, A. L.: Hesperiidae of Vietnam, 14. A new species of the genus *Celaenorrhinus* Hübner, 1819 (Lepidoptera, Hesperiidae). – Atalanta **34** (1/2): 115–118.

Fig. 1: Celaenorrhinus victor spec. nov., holotype J. Cuc Phuong National Park, 2.IV.1998, LE TRONG DAT leg., upperside.

Fig. 2: Id., underside.

Fig. 3: Celaenorrhinus victor spec. nov., paratype Q. Cuc Phuong, 24.III. 1998, Vu Van Lien leg., upperside.

Fig. 4: Id., underside.

Colour plate Xc

DEVYATKIN, A. L. & A. L. MONASTYRSKII: Hesperiidae of Vietnam, 15. New records of Hesperiidae from southern Vietnam (Lepidoptera, Hesperiidae). – Atalanta **34** (1/2): 119–133.

Fig. 1: *Pyroneura callineura natalia* subspec. nov., holotype ♂, Cat Tien Nature Reserve, 10.V.2001, A. L.Monastyrskii leg., upperside. Fig. 2: Id., underside.

1	2
3	4

1	2
3	4

1	2

Colour plate Xa-c



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