Hesperiidae of Vietnam, 19. New records since 2003, with the description of a new species

(Lepidoptera, Hesperiidae) by

by
ALEXEY L. DEVYATKIN
received 9.IV.2012

Summary: The present paper adds further 28 species to the list published in 2003, raising the number of the Vietnamese Hesperiidae to 286. A new species, *Halpe annamensis* spec. nov. is described and illustrated. *Caltoris sirius chimdroa* EVANS, 1949 is raised to species due to differences in the genitalia and its sympatry with the nominate subspecies in North Vietnam.

In 2003, an illustrated checklist of the butterflies of Vietnam, known at that time, was published (Monastyrskii & Devyatkin, 2003), counting 258 species of the Hesperiidae. During the last years, a number of new species was described, new material was collected, and some misidentifications were found in the original list. The present paper is aimed to summarize the new data.

Capila pieridoides pieridoides (Moore, 1878)

1 °, North Vietnam, Lao Cai Province, Van Ban district, Nam Xay commune, 1400 m, 24.IV.2004, R. Berdyev leg.; 1 °, Central Vietnam, Ha Tinh Province, Son Kim, 4.IV. 2003, S. Ryabov leg.

Reported from Vietnam in the general distribution outside Thailand by Kimura (1996), without references. The nominate subspecies is distributed from Assam to the southern Burma (Ataran).

Celaenorrhinus andamanicus hanna Evans. 1949

1 °, Central Vietnam, Quang Binh Province, Phong Nha National Park, 27.IX.2003, S. Ryabov leg.

Described as a subspecies of *C. dhanada* (Moore, [1866]) from the southern Burma; first mentioned as a subspecies of *C. andamanicus* (Wood-Mason & de Nicéville, 1881), to which it is somewhat similar in the appearance and of genitalia, by Pinratana (1985) for Thailand, due to its sympatry with *C. dhanada affinis* Elwes & Edwards, 1897 along with considerable differences in the genitalia. Although it is clear that *C. a. hanna* Evans has nothing to do with *C. dhanada* (Moore), its relations with the island taxon *C. andamanicus* (Wood-Mason & de Nicéville, 1881) still require clarification.

Coladenia koiwayai Maruyama & Uehara, 2008 (= C. fenestrata Devyatkin, 2008 syn. nov.)

4 or, North Vietnam, Lao Cai Province, Thac Bac district, Hoang Lien Nature Reserve, 1800 m, 2.IV.2007, A. L. Monastyrskii leg. (the type series of *C. fenestrata* Devyatkin, 2008).

This species was first found in March 2001 in North Laos (Ohu Pan near Xamneua) by Japanese collectors (Maruyama & Uehara, 2008); *C. koiwayai* Maruyama & Uehara was published one month earlier than *C. fenestrata* Devyatkin.

Daimio tethys roona Evans, 1949 (figs. 1-2)

1 °, North Vietnam, Ha Giang Province, III.2006, THANH leg.

The single of from Vietnam is most similar to the *D. t. roona* Evans, distributed in West China and Yunnan; moreover, the locality "Cha Pa" (most probably, the French transcription of Sa Pa, Lao Cai Province) was mentioned for this subspecies among other localities of Thibet by Evans (1949). However, the relations of the *D. t. roona* Evans with the similarly distributed (to East China and Taiwan) *D. t. moori* (Mabille, 1876) (both subspecies fly together in some localitites, as stated by Evans, 1949) and *D. t. birmana* Evans, 1926, as well as with the nominate *D. tethys* (Ménétriés, 1857) should constitute a matter of a separate study.

Abraximorpha heringi MELL, 1922 (figs. 3-4)

1 ♂, North Vietnam, Lao Cai Province, Van Ban district, Nam Xay commune, 1400 m, 24.IV.2004, R. K. Berdyev leg.; 5 ♂♂, Central Vietnam, Thua Thien Hue Province, Bach Ma National Park, 900 and 1450 m, 20.-24.IV.2007, A. L. Monastyrskii leg. This little known species was described on the base of a single ♀ from South-East China labelled "Drachenkopf, N. Kwang Tung" (Evans, 1949) (northern Guang Dong Province). The specimens from North and Central Vietnam are similar in appearance (the latter rather variable) and quite correspond to the single male from China ("Kuatun, Fukien") in the collection of the Natural History Museum, London (NHML). The taxon *pieridoides* Liu & Gu, 1994, described after a single ♂ from Hainan (Chou, 1994) seems likely to represent an extreme (black pattern reduced) variation of this species.

Carterocephalus alcina Evans, 1939 (figs. 5-6)

34 ♂♂, 10 ♀, North Vietnam, Ha Giang Province, Lung Ca vill., III.-IV.2008, loc. collector leg.

Described from Yunnan (Teng-Yueh-Ting); known also from North Burma (Sadon) (Evans, 1949). The status of the taxon *alcinoides* Lee, 1962 (also from Yunnan), which is highly suspected to be conspecific, needs clarification.

Barca bicolor (OBERTHÜR, 1896)

3 °C, North Vietnam, Lao Cai Province, Thac Bac district, Hoang Lien Nature Reserve, Tram Ton Pass, 1800 m, 2.IV. 2007, A. L. Monastyrskii leg.; 1 °C, the same data, 6.IV.2007, A. L. Monastyrskii leg.; 2 °C, the same data, 2.V.2007, A. Schinov leg. This species, distributed in W. and E. China, has been previously known in Vietnam after 5 old specimens from Tonkin in the collection of The Natural History Museum (London) (Evans, 1949).

Ampittia virgata virgata Leech, 1890

1 ♂, North Vietnam, Cao Bang Province, Nguen Binh, 800 m, 1.-12.V.2003, S. Ryabov leg.; 1 ♀, same data, but 15.V.2003. Widely distributed in the southern part of China from Sichuan to Guanxi (Evans, 1949); *A. v. myakei* Matsumura, 1910 is known from Taiwan.

Sebastonyma suthepiana Murayama & Kimura, 1990

Recorded from the southern part of Vietnam by Miyazaki et al. (2007b) (a and \$\phi\$ figured). Described from North Thailand (Chiang Mai); found also in Laos (Osada et al., 1999).

Pedesta serena (Evans, 1937)

2 ord, North Vietnam, Lao Cai Province, Sa Pa, 1600 m, 11.-23.V.2006, S. A. RYABOV leg.

The species was mentioned earlier (Devyatkin & Monastyrskii, 1999) for North Vietnam (Ngai Tio) after Evans (1949). The records from Central Vietnam should be referred to the species listed below.

Thoressa [Pedesta] xiaoquingae (Huang & Zhan, 2004)

1 °, North Vietnam, Lao Cai Province, Van Ban district, Nam Xay commune, 29.III.2005, A. L. Monastyrskii leg.

Described from Guangdong Province, South-East China, this species was listed earlier from Kon Plong and Ngoc Linh, both Central Vietnam, Kon Tum Province (Devyatkin & Monastyrskii, 2002) as *Pedesta serena* (Evans, 1937), to which it is rather similar in the appearance and of genitalia. In my opinion, simple unification of the genera *Pedesta* Hemming, 1934 (type species *Isoteinon masuriensis* Moore, 1878) and *Thoressa* Swinhoe, [1913] (type species *Pamphila masoni* Moore, [1879]) under the last name, as proposed by Huang & Zhan (2004), is premature without treatment of individual taxa since the type species of both genera are fairly distant in all characters.

Halpe annamensis spec. nov. (figs. 7-8)

Holotype $\[\]$, Central Vietnam, Khanh Hoa Province, Dien Khanh district, Hon Ba Nature Reserve, 21.IV.2006, A. L. Monastyrskii leg. Paratypes: $2\[\]$ $\[\]$ $\[\]$ $\[\]$ same locality, 24.V. 2005, 30.V. 2005, A. L. Monastyrskii leg.

The holotype and one paratype are deposited in the collection of the Department of Entomology, Moscow State University. One paratype will be transferred to NHML.

Description and diagnosis: In general, similar to other taxa of the *H. zema* (Hewitson, 1877) - *ormenes* (PLötz, 1886) complex in the wing pattern and spoon-like end of cuiller of clasp, but differs in the following characters: the spots in spaces 2 and 3 on forewing are slightly overlapping (as in *H. zema*); the white band on the hindwing underside is more narrow and inwardly straight (although wider than in *H. elana* Eliot, 1959).

The main differences are in the \$\sigma\$ genitalia: they are much larger compared to those of similarly-sized specimens of the nominate \$H\$. ormenes (Plotz) and about the size of those of \$H\$. zema (Hewits.), being more robust; uncus longer and wider than in other species and more deeply divided; lateral processes of tegumen also much longer, thinner and straight. Ventral side of clasp elbowed at the middle in lateral view. The spoon-like end of cuiller of clasp is much larger than in any other species of this group and has a somewhat rounded-triangular shape in dorsal view, being spined from both sides (fig. 11 A). The shape of cuiller in \$H\$. zema (Hewits.) (fig. 11 C) is entirely different, and in the subspecies of \$H\$. ormenes (Plotz) it is the same as in the nominate one (fig. 11 B), as it was illustrated for the \$H\$. z. vilasina Fruhstorfer, 1911 from Malaya (Eliot, 1959) and \$H\$. z. vistula Evans, 1937 from Borneo (Maruyama & Otsuka, 1991). In a further similar species, \$H\$. elana Eliot, 1959, this structure is even more narrow, flattened and symmetrical (Eliot, 1959). The aedeagus of the new species is also longer than in \$H\$. ormenes (Plotz) and even than in \$H\$. zema (Hewits.). Length of the forewing 16,5-17 mm.

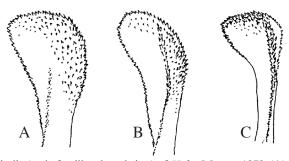


Fig. 11: Details of σ genitalia (end of cuiller, dorsal view) of *Halpe* Moore, 1878. (A) *H. annamensis* spec. nov.; (B) *H. ormenes ormenes* (PLÖTZ, 1886) (Nias); (C) *H. zema zema* (HEWITSON, 1877) (North Vietnam).

Halpe insignis (DISTANT, 1886)

1 °, Central Vietnam, Thua Thien Hue Province, Huong Thuy district, Duong Hoa commune, 100-400 m, 13.V.2005, Pham Minh Hung leg. Described from Singapore; found also in Thailand, South Burma, Malay Peninsula, Sumatra and Borneo. The present record once more supports the idea that the lowlands of Thua Thien Hue may give home to a number of southern-oriented species (Devyatkin, 2007).

Halpe gammoides Devyatkin, 2008

1 9, North Vietnam, Vinh Phuc Province, Tam Dao National Park, 20.VI.2008, D. I. LINDSLEY leg.

This species was previously reported from North and Central Vietnam (Tam Dao, Bu Huong, Pu Mat) under the name *H. gamma* Evans, 1937 (Devyatkin & Monastyrskii, 1999; Monastyrskii & Devyatkin, 2003) and later described as new after a comparison with the real *H. gamma* Evans, 1937 from Taiwan, its type locality (Devyatkin, 2008). A hardly damaged \$\varphi\$ (only the wings and abdomen left) from Tam Dao, which was sent to me for identification by Mr. D. Lindsley, almost undoubtedly belongs to this species due to its location and external similarity to the \$\varphi\varphi\varphi of *H. gammoides* Devyatkin.

Halpe dizangpusa Huang, 2002

1 °, North East Vietnam, Bac Giang Province, Luc Nam, 17.IV.2003, S. A. Ryabov leg; 2 °С, North Vietnam, Lao Cai Province, Van Ban district, Nam Xay commune, 11.IV.2005, A. L. Monastyrskii leg.

The species seems to be widely distributed in the whole South East China, including Hainan (HUANG & WU, 2003); the westernmost

record from Lao Cai may suggest possible overlapping of its distribution with that of its close relative, *H. nephele* Leech, 1893, known from West China.

Halpe aucma Swinhoe, 1893

Listed as a subspecies of *H. homolea* (Hewitson, [1868]) by Devyatkin & Monastyrskii (1999) and Monastyrskii & Devyatkin (2003); till now, known only from the north of the country (Tam Dao).

The species status was given by Huang, who found its sympatry with two other formal subspecies of *H. homolea* (Hewits.), namely *H. h. molta* Evans, 1949 and *H. h. filda* Evans, 1949 in the south-eastern Thibet (Metok) and gave the photographs of their genitalia (Huang, 2003). In fact, all these taxa form a rather compact group which has nothing to do with the nominate *H. homolea* (Hewits.) from Singapore (the holotype examined - A. D.) in view of sharp differences in the σ genitalia. Still, the question about the taxonomic relations of *H. aucma* Swin. with another formal subspecies of *H. homolea* (Hewits.), viz. *H. h. perfossa* South, 1914 (Mishmi Hills, Assam - only the type, examined) which is similar in the σ genitalia, remains open.

Halpe handa Evans, 1949

North Vietnam: 1 \(\, \), Vinh Phuc Province, Tam Dao National Park, 20.VI.2008, D. I. Lindsley leg.; Central Vietnam: 1 \(\, \, \), Ha Tinh Province, Huong Son forest complex, 27.IV.2001, A. L. Monastyrskii leg.; 1 \(\, \, \), Thua Thien Hue Province, Bach Ma National Park, 1300 m, 19.VI.2005; 2 \(\, \, \, \, \, \) same loc., top 1450 m, 24.IV.2007, all A. L. Monastyrskii leg.; 1 \(\, \, \, \, \), Quang Nam Province, A'Rec district, 850 m, 28.IX.2002, Rob Shore leg.; 1 \(\, \, \, \, \) Lam Dong Province, Da Teh district, 550 m, 3.V.2003, A. L. Monastyrskii leg. This taxon was also reported as a subspecies of \(\, \, \) homolea (Hewits.) from Central Vietnam (Devyatkin & Monastyrskii, 2002, 2003). It was first listed as a separate species by Osada et al. (1999), then by Huang (2003); its distribution seems to overlap with that of other taxa of this group in South China and North Vietnam, and the sympatry with \(\, \, \) aucma Swin. in Tam Dao, as well as the differences in the \(\, \, \) (the type of \(\, \, \) handa Evans examined) and \(\, \, \) genitalia confirm its species status.

Halpe babensis Devyatkin, 2008

Described on the base of a single of specimen from Ba Be (North Vietnam, Bac Can Province) (Devyatkin, 2008); no further material has been collected.

Halpe interposita Devyatkin, 2008

Till now only the holotype of this species from Bach Ma National Park (Central Vietnam, Thua Thien Hue Province) is known (Devyatkin, 2008).

Halpe clara Cassidy, 1985

1 ♂, Central Vietnam, Quang Binh Province, Phong Nha National Park, 12.VII.2003, S. Ryabov leg.; 1 ♂, 1 ♀ (in copula), Central Vietnam, Thua Thien Hue Province, A Luoi district, Huong Nguyen commune, 100-300m, restore forest, 24.V.2005, Do Anh Tuan leg.

These records seem to be the northernmost in the distribution of the species. Earlier, it was reported from the southern part of Vietnam by Miyazaki et al. (2007b) (& photographed, no genitalia figured). Described from Brunei (Borneo Is.) and Peninsular Malaysia, otherwise known from Peninsular Thailand (Kimura, 1997).

The taxonomic relations between the island and mainland populations require clarification, since even the holotype from Brunei and a paratype σ from Fraser's Hill, Malay Peninsula (both in NHML, examined) show some differences in the genitalia.

Scobura tytleri (Evans, 1914)

1 °, Central Vietnam, Kon Tum Province, Ngoc Linh Nature Reserve, 1650m, 26.III.2006, A. L. Monastyrskii leg.

This species has been so far known only from Assam (Evans, 1949). The Vietnamese record is not highly unexpected, since the high-altitude Kon Tum plateau gives home to a number of other northern-oriented Hesperiidae, like *Capila lidderdali* (Elwes, 1888), *C. zennara* (Moore, [1866]), *Celaenorrhinus aspersa* Leech, 1891, and so on (Devyatkin & Monastyrskii, 2002). The taxonomic relations with the recently described *S. stellata* Fan, Chiba & Wang, 2010 from Sichuan and Guangdong, which may prove to be conspecific, require a separate study.

Scobura phuongi Devyatkin, 2004

Described from North Vietnam, Tuyen Quang Province. The species was first recorded as S. coniata coniata Hering, 1918 from Cuc Phuong National Park (North Vietnam, Ninh Binh Province) by IKEDA et al. (2001), judging from the photographs and figures of the S genitalia. This record was mentioned but not discussed in the revision of the S. coniata-group (Devyatkin, 2004).

Zographetus rama (Mabille, [1877])

1 &, South Vietnam, Ba Ria, Vung Tau Province, Binh Chau Nature Reserve, primary forest, 2.VI.2007, A. L. Monastyrskii leg. Distributed from Burma and Laos to Sumatra, Sulawesi and the Philippines; rare in most localities.

Salanoemia fuscicornis (Elwes & Edwards, 1897)

Reported from the southern part of Vietnam by Miyazaki et al. (2007a) (& figured). Distributed from Laos and Thailand to Borneo and Pulo Laut Is.

Zela zeta Devyatkin, 2007

Described from Central Vietnam (Thua Thien Hue Province) after 2 ♂♂, 2 ♀♀ (Devyatkin, 2007), and till now no other material has been collected.

Zela elioti Evans, [1939] (figs. 9-10)

1 °, South Vietnam, Dong Nai Province, Cat Tien National Park, 25.VI.2009, A. L. Monastyrskii leg.

The single of from Vietnam, if tested by the key given in the paper of KIRTON & ELIOT (2004), comes directly to this species, although its genitalia show some differences from those of *Z. elioti* EVANS from Langkawi Island figured in the same paper. However, the authors state that in the subgenus *Zampa* DE NICEVILLE, [1895], to which this species belongs, "the shape of valvae is variable, even within each species, making it difficult to ascertain the consistency of these differences from only a small series of specimens"

(Kirton & Eliot, 2004). The species ranges from Thailand through Peninsular Malaysia to Borneo.

Hidari doesoena Martin, 1895

Recorded from Thua Thien Hue Province (Devyatkin, 2007); distributed in the Peninsular Thailand, Malay Peninsula, Sumatra (type locality), Batoe and Sipora islands. The only former subspecies, *H. d. gloria* Evans, 1949, known only from the north-western Borneo, was raised to species level in the same paper due to the striking differences in the wing pattern.

Ochlodes bouddha (MABILLE, 1876)

1 °, North Vietnam, Lao Cai Province, Sa Pa, 1600 m, 11.-23.V.2006, S. A. RYABOV leg.

Described from West China (Moupin); distributed southwards to North Thailand (KIMURA, 1997) and North Laos (OSADA et al., 1999).

Pelopidas sinensis (MABILLE, 1877)

2 ♂♂, 1 ♀, North Vietnam, Ha Giang Province, Lung Ca vill., III.-IV.2008, loc. collector leg.

The species is widely distributed from North-West Himalaya to East China, northern Burma and Laos.

Caltoris chimdroa (EVANS, 1926) stat. nov.

1 °, North Vietnam, Lao Cai Province, Sa Pa, 1600 m, 11.-23.V.2006, S. A. Ryabov leg.

This taxon was described as a subspecies of *C. sirius* (EVANS, 1926) from Chimdro (now Motuo) Valley (south-eastern Thibet). The single σ from Lao Cai quite corresponds to the type specimen in NHML (examined). Quite recently, good photographs of this skipper and its σ genitalia from the type locality were published by Huang (2011); in our specimen, the spots are smaller, but even a first-glance comparison of the genitalia leaves no doubt in their identity. Taking into account the occurrence of the nominate *C. sirius* (EVANS), in the same area of Lao Cai (Hoang Lien Nature Reserve) and differences in the genitalia (shape of uncus, gnathos and clasps), it is clear that the rank of *C. chimdroa* (EVANS, 1926) **stat. nov.** should be raised to species.

Iton watsonii (DE NICÉVILLE, 1890)

Recorded from the southern part of Vietnam by Miyazaki et al. (2007a) (σ and \circ figured). Known also from Burma, Thailand and Laos.

The above records, apart from misidentifications, add further 28 species to the previous list (Monastyrskii & Devyatkin, 2003), thus raising the number of the Vietnamese Hesperiidae to 286. Most of the new records come from the northernmost and the southernmost parts of Vietnam, as well as from the lowland limestone area of the Central Vietnam, and the total number of species is still considered to be far not less than 300, quite in accordance with what was supposed earlier (Devyatkin & Monastyrskii, 2002, 2003).

Acknowledgements: My sincere thanks are due to my friends Dr. A. L. Monastyrskii and S. A. Ryabov for placing valuable material at my disposal, as well as to Mr. D. Lindsley (London) and Dr. Y.-F. Hsu (Taibei) for providing new and comparative specimens.

References

Снои, Io (Ed.) (1994): Monographia Rhopalocerorum Sinensium (Monograph of Chinese Butterflies) 2. - Henan Sci. & Technol. Publishing House.

DEVYATKIN, A. L. (2004): Taxonomic studies on Oriental Hesperiidae, 1. A revision of the *Scobura coniata* Hering, 1918 - group (Lepidoptera, Hesperiidae). - Atalanta 35 (1/2): 57-66, Würzburg.

DEVYATKIN, A. L. (2007): Hesperiidae of Vietnam, 16. A new species and a new record of the Hesperiidae from Central Vietnam, with a revisional note on the genus Hidari Distant, 1886 (Lepidoptera, Hesperiidae). - Atalanta 38 (3/4): 347-349, Würzburg.

DEVYATKIN, A. L. (2008): Hesperiidae of Vietnam, 18. Three new species of *Halpe* Moore, 1878 (Lepidoptera, Hesperiidae). - Atalanta **39** (1/4): 292-296, Würzburg.

Devyatkin, A. L. & A. L. Monastyrskii (1999): Hesperiidae of Vietnam 5. An annotated list of the Hesperiidae of North and Central Vietnam (Lepidoptera, Hesperiidae). - Atalanta 29 (1/4): 151-184, Würzburg.

DEVYATKIN, A. L. & A. L. Monastyrskii (2002): Hesperiidae of Vietnam, 12. A further contribution to the Hesperiidae fauna of North and Central Vietnam. - Atalanta 33 (1/2): 137-155, Würzburg.

DEVYATKIN, A. L. & A. L. Monastyrskii (2003): Hesperiidae of Vietnam, 15. New records of Hesperiidae from southern Vietnam (Lepidoptera, Hesperiidae). - Atalanta 34 (1/2): 119-133, Würzburg.

Eliot, J. N. (1959): New or little known butterflies from Malaya. - Bull. Brit. Mus. (Nat. Hist.) 7 (8): 371-391, London.

Evans, W. H. (1949): A catalogue of the Hesperiidae from Europe, Asia and Australia in the British Museum (Natural History). - Trust. Brit. Mus., London.

Huang, H. (2003): A list of butterflies collected from Nujiang (Lou Tse Kiang) and Dulongjiang, China with descriptions of new species, new subspecies, and revisional notes (Lepidoptera, Rhopalocera). - Neue Ent. Nachr. 55: 3-114, Marktleuthen.

Huang, H. (2011): A review of the genera *Caltoris* Swinhoe and *Baoris* Moore from China (Lepidoptera: Hesperiidae: Hesperiinae). - Atalanta 42 (1-4): 201-220, Würzburg.

Huang, H. & C.-S. Wu (2003): New and little known Chinese butterflies in the collection of the Institute of Zoology, Academia Sinica, Beijing - 1 (Lepidoptera, Rhopalocera). - Neue Ent. Nachr. 55: 115-143, Marktleuthen.

HUANG, H. & C.-H. ZHAN (2004): Notes on the genera Thoressa and Pedesta, with description of a new species from South China (Lepidoptera, Hesperiidae). - Neue Ent. Nachr. 57: 179-186, Marktleuthen.

IKEDA, K., NISHIMURA, M. & H. INAGAKI (2001): Butterflies of Cuc Phuong National Park in Nothern Vietnam (5). - Butterflies 30: 58-66, Tokyo.

Kimura, Y. (1996): Newly recorded hesperiid butterflies from Thailand since 1985. - Butterflies 15: 18-26, Tokyo.

KIMURA, Y. (1997): Newly recorded hesperiid butterflies from Thailand since 1985 (II). - Butterflies 17: 38-50, Tokyo.

Kirton, L. G. & J. N. Eliot (2004): A Revision of the Rattan-Feeding Skipper Genus, *Zela* DE NICÉVILLE (Lepidoptera, Hesperiidae). - Malayan Nature J. **56** (4): 317-367, Kuala Lumpur.

MARUYAMA, K. & K. OTSUKA (1991): Butterflies of Borneo 2 (2). Hesperiidae. Addendum of Vol. 1. - Tobishima Corporation,

Tokyo (text Japanese and English).

MARUYAMA, K. & J. UEHARA (2008): Two new species and one new subspecies of Pyrginae (Lepidoptera, Hesperiidae) from Sumatra and Laos. - Trans. Lepid. Soc. Japan 59 (4): 285-290, Tokyo.

MIYAZAKI, S., TAMAMITSU, S. & S. KOTARO (2007a): Notes on the Butterflies of the Southern Part of Vietnam (5). - Yadoriga 212: 2-18, Tokyo (in Japanese).

MIYAZAKI, S., TAMAMITSU, S. & S. KOTARO (2007b): Notes on the Butterflies of the Southern Part of Vietnam (6). - Yadoriga 214: 35-48, Toikyo (In Japanese).

Monastyrskii, A. L. & A. L. Devyatkin (2003): Butterflies of Vietnam (an illustrated checklist). - Dolphin Media, Hanoi. Osada, S., Uémura, Y. & J. Uehara (1999): An illustrated checklist of the butterflies of Laos P.D.R. - Mokuyo-sha, Tokyo. Pinratana, Bro. A. (1985): Butterflies in Thailand 5. Hesperiidae. - The Viratham Press, Bangkok.

Address of the author

ALEXEY L. DEVYATKIN

Department of Entomology, Faculty of Biology

Moscow State University

Russia-119991 Moscow



Fig. 1, 2: Daimio tethys roona (Evans, 1949), J., North Vietnam, Ha Giang Prov., III. 2006, Thanh leg.

Fig. 3, 4: Abraximorpha heringi Mell, 1922, &, Central Vietnam, Thua Thien Hue Prov., Bach Ma National Park, top 1450 m, 22.IV.2007, A. L. Monastyrskii leg.

Fig. 5, 6: Carterocephalus alcina Evans, 1939, & North Vietnam, Ha Giang Prov., III-IV. 2008, loc. collector leg.

Fig. 7, 8: Halpe annamensis spec. nov., holotype &, Central Vietnam, Khanh Hoa Prov., Hon Ba Nature Reserve, 21.IV.2006, A. L. Monastyrskii leg.

Fig. 9, 10: Zela elioti Evans, [1939], &, South Vietnam, Dong Nai Prov., Cat Tien National Park, 25.VI. 2009, A. L. Monastyrskii leg.

ZOBODAT - www.zobodat.at

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: Atalanta

Jahr/Year: 2012

Band/Volume: 43

Autor(en)/Author(s): Devyatkin Alexey L.

Artikel/Article: Hesperiidae of Vietnam, 19. New records since 2003, with the

description of a new species 151-155