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A review of the genus *Macrosiagon* in Laos (Coleoptera: Ripiphoridae)

by Jan Batelka

Abstract. The genus *Macrosiagon* Hentz, 1830 (Coleoptera: Ripiphoridae) in Laos is reviewed. Four species of the genus are figured and keyed and their distribution discussed. First records of *Macrosiagon ferruginea* (Fabricius, 1775) from Myanmar and Thailand are given.

Key words. Coleoptera – Ripiphoridae – Ripiphorinae – *Macrosiagon* – Laos – Myanmar – Thailand – Oriental Region – faunistics

Introduction

The Ripiphoridae (Tenebrionoidea) is an often-neglected beetle family in the field because of the short life span of the imagines and the endoparasitic way of life of their larvae, which are parasitoids of larvae of various species of cockroaches (Blattodea), wood-boring beetles (Coleoptera) and wasps and bees (Hymenoptera) (BESUCHET 1956, BATELKA 2005, BATELKA & HOEHN 2007, BATELKA & STRAKA 2011). The main problems at the taxonomic level are absence of revisions of the most diverse genera along with the high proportion of synonyms (two synonyms per each valid species on average) and the fact that more than half of all species are insufficiently or even incorrectly described (BATELKA 2008a, 2011).

It is therefore not surprising that the Ripiphoridae of Laos or any of the adjacent countries has never been reviewed (except for a very outdated list of the Chinese ripiphorids given by GRESSITT (1941)). Apart from four species of the genus *Macrosiagon* Hentz, 1830 corroborated in this paper, at least seven species of *Micropelecotoides* Pic, 1910, of which some are undescribed (BATELKA in prep.), and two genera of the subfamily Ripidiinae, each with one undescribed species, are also known to me from this country (Batelka, unpublished data).

Macrosiagon is one of the most speciose and simultaneously the only ripiphorid genus in which almost all the types of the Old World species-group taxa have been revised and knowledge about its distribution has been considerable enhanced (BATELKA 2011 and references thereof). Here I put together all available records of this genus from Laos with remarks on host associations and the distribution of each species.

Material and Methods

Images were taken using a Canon EOS 550D digital camera with an MP-E 65 mm macrolens; partially focused images of each figure were completed using Zerene Stacker software.

Abbreviations

BMNH The Natural History Museum, London, United Kingdom (Maxwell V. L. Barclay)
 MNHN Muséum National d'Histoire Naturelle, Paris, France (Azadeh Taghavian)
 JBCP Jan Batelka collection, Praha, Czech Republic

Taxonomy

RIPIPHORINAE

Macrosiagonini

Macrosiagon Hentz, 1830

Macrosiagon bifasciata (Marseul, 1877)

(Figs 1–2)

= *M. donceeli* Pic, 1908; *M. bifasciata reducta* Pic, 1909; *M. medana* Pic, 1910; *M. sumatrensis* Pic, 1912; *M. bifasciata coreana* Pic, 1955; *M. bifasciata tschungseni* Pic, 1955 (BATELKA 2007, 2008a, 2011).

Published record. BATELKA (2011: 595): 1 ex., “E Laos, Hua Phan prov., Ban Sulei env., 30 km S of Xam Neua, Phou Pan mts., 1500 m, 20°13'39"N, 103°59'33"E, 6.–17.v.2004”.

New record. 6 ex. (BMNH, JBCP), “NE Laos, Hua Phan prov., Ban Sulei, Phou Pan (Mt.), 1300–1900 m, 20°12'N, 104°01'E, 7.iv.–25.v.2010, leg. C. Holzschuh”.

Host species. Different species of the genera *Chalybion* Dahlbom, 1843, *Sceliphron* Klug, 1801 (Sphecidae: Sceliphronini), *Cerceris* Latreille, 1802 (Crabronidae: Philanthinae) and possible *Ancistrocerus* Wesmael, 1836 (Vespididae: Eumeninae) (BATELKA & HOEHN 2007).

Distribution. Oriental and Palaearctic species: China (Beijing, Fujian, Sichuan, Yunnan), Indonesia (Java, Sumatra), India (Darjeeling, Himachal Pradesh, Uttar Pradesh), Japan, Nepal, Korean Peninsula, Laos, Philippines and Vietnam (BATELKA 2011).

Macrosiagon nasuta (Thunberg, 1784)

(Figs 3–4)

= *M. obscuricolor* Pic, 1912; *M. obscuricolor semiobscura* Pic, 1923; *M. iwatai* Kôno, 1936; *M. discoidalis* Pic, 1950 (BATELKA 2008a).

Published record. BATELKA (2011: 611): 1 ex., “Laos, Bolikhaxai pr., 70 km NEE Vientiane, 150 m, 18°16'N, 103°11'E, 2.–3.vi.1997”.

New record. 1 ex. (BMNH), “NE Laos, Hua Phan prov., Ban Sulei, Phou Pan (Mt.), 1300–1900 m, 20°12'N, 104°01'E, 7.iv.–25.v.2010, leg. C. Holzschuh”.

Host species. Many species of the wasp genera *Anterhynchium* Saussure, 1863, *Discoelius* Latreille, 1809, *Eumenes* Latreille, 1802, *Euodynerus* Dalla Torre, 1904, *Orancistrocerus* Vecht, 1963, *Oreumenes* Bequaert, 1926, *Pararrhynchium* Saussure, 1855 and *Rhynchium* Spinola, 1806 (Vespididae: Eumeninae) (BATELKA & HOEHN 2007).

Distribution. Widely distributed species in east and southeast Asia: China (Fujian, Jiangxi, Taiwan, Zhejiang; record from Guandong province (GRESSITT 1941) is given by a mistake), Indonesia (Sumatra, Sulawesi), Japan, Kalimantan (both Indonesian and Malaysian parts), Korean Peninsula, Laos, Nicobar Islands, Philippines, “Thibet: Chápá” (GRESSITT 1941, BATELKA 2004, 2011).



Figs 1–8. 1–2 *Macrosiagon bifasciata* (Marseul, 1877): 1 – male (6 mm); 2 – female (8 mm). 3–4 *M. nasuta* (Thunberg, 1784): 3 – male (6 mm); 4 – female (6 mm). 5–6 *M. pusilla* (Gerstaecker, 1855): 5 – male (7 mm); 6 – female (9 mm). 7–8 *M. spinicollis* (Fairmaire, 1893): 7 – male (9 mm); 8 – female (10 mm).

***Macrosiagon pusilla* (Gerstaecker, 1855)**

(Figs 5–6)

= *M. cyanivestis* (Marseul, 1877); *M. gerstaeckeri* (Harold, 1878); *M. variicollis* (Fairmaire, 1894); *M. variicollis tonkinea* Pic, 1906; *M. acutipennis* Gressitt, 1941; *M. atronitida* Gressitt, 1941; *M. atriceps* Pic, 1950; *M. corporaali* Pic, 1950; *M. cyanivestis atricolor* Pic, 1953; *M. cyanivestis bicoloriceps* Pic, 1953; *M. cyanivestis bicoloripes* Pic, 1953; *M. cyanivestis coomani* Pic, 1953; *M. cyanivestis pieli* Pic, 1953; *M. thibetana* Pic, 1953; *M. cyanivestis fukienensis* Pic, 1955 (BATELKA 2008a).

Published record. BATELKA (2007: 244): 2 ex., “NE Laos, Hua Phan prov., Ban Sulei, 1300–2000 m, 20°13'N, 103°59'E, Phou Pan Mt. env., 6.–18.v. 2004”.

New record. 68 ex. (BMNH, JBCP), “NE Laos, Hua Phan prov., Ban Sulei, Phou Pan (Mt.), 1300–1900 m, 20°12'N, 104°01'E, 7.iv.–25.v.2010, leg. C. Holzschuh”; 2 ex. (JBCP), “NE Laos, Hua Phan prov., Mt. Phou Pan, 900–1000 m, 20°12'N, 103°59'E, 10.–21.vi.2010, leg. S. Jakl and Lao collectors”.

Host species. Species of *Tiphia* Fabricius, 1775 (Tiphidae: Tiphini) and *Auplopus* Spinola, 1841 (Pompilidae: Auplopodini) wasps (BATELKA & HOEHN 2007).

Distribution. Widely distributed species in east, south and southeast Asia: Bhutan, China (Fujian, Guangdong, Guizhou, Hebei, Hunan, Sichuan, Xizang, Yunnan), India (Assam, “Bengale: Barway”, Darjeeling, Himachal Pradesh, Kerala, Meghalaya, Uttaranchal, Tamil Nadu), Indonesia (Kalimantan, Sulawesi, Sumatra), Japan, Korean Peninsula (including Cheju Do Island), Laos, Malaysia, Nepal, Philippines, Russia (Far East), Sri Lanka, Thailand and Vietnam (BATELKA 2011).

***Macrosiagon spinicollis* (Fairmaire, 1893)**

(Figs 7–8)

= *M. bipartita* (Fairmaire, 1894); *M. leseleuci* Pic, 1906; *M. leseleuci inapicalis* Pic, 1922; *M. leseleuci vitalisi* Pic, 1922; *M. uninotaticollis* M. Chûjô, 1935; *M. leseleuci diversipennis* Pic, 1951 (BATELKA 2008a).

Published records. PIC (1922: 21–22) (as *Macrosiagon leseleuci* var. *Vitalisi* Pic, 1922: 21, type locality: “Cambodge et Laos” and *M. leseleuci* var. *inapicalis* Pic, 1922: 22, type locality: “Laos”).

Note. Examination of varieties “*inapicalis*” and “*Vitalisi*” represented in the Pic collection of *Macrosiagon* in Muséum national d'Histoire naturelle in Paris (MNHN) by a single voucher specimen each, revealed that, contrary to the type localities given in the descriptions, both specimens (labelled subsequently by myself as Lectotypes) bear the locality labels “Cochinchine” (BATELKA 2003, 2007). Cochinchine at the time was an area situated south of Saigon in southernmost tip of what is now Vietnam. PIC (1922) however explicitly states in the foreword note that the majority of material described in the paper was collected by Vitalis de Salvaza in Laos. Whether a labelling error or an incorrect type locality in the descriptions occurred in this case is impossible to infer from the information at hand. During my 2013 visit to MNHN, I discovered two additional specimens of both varieties in box labelled “Micropelecotoides, Eucténie, Evaniocera, Actinocerus, Falsopedilus, Madrasindus, Setosicornia, Ancholaemus, Rhipiphorus, Rhipidius, Myodites” (= box no. 9 of Pic's collection of Rhipiphoridae) with original labels of Vitalis de Salvaza. A Specimen with black elytra is labelled “Laos [printed] / Pak Lu?g [handwritten, possible Pak Luong, 20°56'N, 102°45'E] / le 24.V.1920 [p/hw] / R. Vitalis de Salvaza [p] // leseleuci var [Pic hw] // v. inapicalis / Pic [Pic hw]”. A specimen with ferrugineous elytra is labelled “Laos [p] / Vientiane [hw] / le 7.6.1915 [p/hw] / R. Vitalis de Salvaza [p] // v. vitalisi [Pic hw] // label with some remarks [Pic

hw] // 1395 [Pic hw]". Both newly-discovered specimens possibly came from the Vitalis de Salvaza collection or Pic perhaps did not return the specimens to the collector. All available data suggest that the specimens were used by Pic for the description of the two varieties. Each specimen is morphologically identical to the actual specimen from Cochinchine that was designated as lectotype by BATELKA (2007) and I thus regard them, in view of the available data and according to article 74.1.3. of the Code (ICZN 1999), as paralectotypes of the varieties *Vitalisi* and *inapicalis* respectively.

Host species. Unknown.

Distribution. Oriental species reaching the south-eastern part of the Palaearctic region: Andaman Isl., Cambodia, India (Darjeeling, Karnataka, Uttar Pradesh), Indonesia (Java, Sulawesi, Sumatra), China (Guandong, Gansu, Hainan, Taiwan), Laos, Myanmar, Nepal, Philippines, Thailand, Vietnam (BATELKA 2004, 2011).

Key to *Macrosiagon* species in Laos

1. Median lobe of pronotal disc with a short, elevated process at apex, elytra yellow or orange with black markings or spots. *M. bifasciata* (Marseul, 1877)
- Median lobe of pronotal disc smooth, elytra unicolourous or bicolourous but without black markings or spots. 2.
2. Elytra 1.5–1.8 × as long as pronotal disc, flattened dorsally, always matt black or dark brown, antennal rami in males flattened, pronotal disc always black. *M. nasuta* (Thunberg, 1784)
- Elytra 2.3–2.7 × as long as pronotal disc, convex dorsally along the medial suture, usually lustrous black, sometimes orange or yellowish, antennal rami in males thread-like, pronotal disc black, red or orange with medial spot. 3.
3. Head with a simple, rounded occiput. *M. pusilla* (Gerstaecker, 1855)
- Head with a distinct longitudinal ridge in the middle of occiput. *M. spinicollis* (Fairmaire, 1893)

Conclusion

To date I have had the opportunity to examine 85 specimens of *Macrosiagon* collected in Laos, resulting in new country-records for three the most commonly-collected species in the Oriental region (BATELKA 2007, 2011). For all species occurring in Laos no more than four exact localities are known, with 96% of the material coming from Phou Pan locality (for this phenomenon see also ŠVIHLA (2009)), so their distribution or habitat preferences in Laos cannot be commented upon. Bionomical data related to the Phou Pan specimens do not exist. However personal communication with certain colleagues (e.g. Jiří Hájek, Stanislav Ják, David Král and Vít Kubáň), indicates that most, or even all, of this material was collected by local people ("Lao collectors"),

probably on flowers of *Castanopsis* spp. trees (Fagaceae), usually several metres above ground level. Available specimens of *Macrosiagon bifasciata*, *M. nasuta* and *M. pusilla* from Phou Pan at least prove that all three species are able to share exactly the same locality (biota) with identical seasonality of imagines, possibly because of different host groups they are parasitic upon.

Macrosiagon species represented in Laos are predominantly of Oriental distribution, but they also extend their ranges into the south-eastern part of the Palaearctic region. A biogeography of the genus is still lacking, but according to BATELKA (2011) the above-corroborated species belong to three species groups: the worldwide-distributed *Macrosiagon bifasciata* species-group (*M. bifasciata*), the *M. nasuta* species-group restricted to the Old World (*M. nasuta*) and the worldwide (excepting Australia) *M. limbata* species-group (*M. pusilla* and *M. spinicollis*).

At most, two *Macrosiagon* species more might be expected for the fauna of Laos. *Macrosiagon armata* (Waterhouse, 1883) is recorded to date only from India (Tamil Nadu and Darjeeling) and from Indonesia (Sumatra); its disjunct distribution is, however, assumed to be a collecting artefact and much wider distribution in between those two countries is to be expected (BATELKA 2011). The lectotype of this species is figured in BATELKA (2011, figs 1–2). Another species, *M. ferruginea* (Fabricius, 1775), which is widely distributed throughout southern Europe, all of Africa and a large part of Asia (BATELKA 2011), may also occur in Laos as it is naturally present in the South-eastern Asia region. The species was recorded from China (Fujian, Guandong, Taiwan) by GRESSITT (1941) and three voucher specimens of *M. ferruginea* from Myanmar and Thailand are deposited in my collection (1 ex. “Myanmar, Mandalay env., 200 m, 26.ii.–6.iii.1996, Paštika lgt.”; 1 ex. “Thailand bor., Fang, Tha Ton, 26.v.1997, M. Snížek lgt.”; 1 ex. “Thailand bor., Fang env., 15.vi.1995, M. Snížek lgt.”; all JBCP). Colour figures of this species are available elsewhere (e.g. in BATELKA 2008b, plate 1).

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References

- BATELKA J. (2003): *New synonyms and notes on the distribution of Macrosiagon bipartitum and Macrosiagon cyaniveste (Coleoptera: Ripiphoridae)*. Acta Societatis Zoologicae Bohemicae **67**: 59–63.
- BATELKA J. (2004): *Contribution on the synonymy of Palaearctic and Oriental species of Macrosiagon (Coleoptera: Ripiphoridae). Part II*. Acta Societatis Zoologicae Bohemicae **68**: 9–13.
- BATELKA J. (2005): *New synonym of the genus Clinops (Coleoptera: Ripiphoridae) with bionomical and distributional notes on C. spectabilis*. Folia Heyrovskyana, Serie A, **13**: 27–34.
- BATELKA J. (2007): *Taxonomy and distribution of Palaearctic and Oriental species of the genus Macrosiagon (Coleoptera: Ripiphoridae). Part III*. Bulletin de la Société Entomologique de France **112**: 239–248.
- BATELKA J. (2008a): *Family Ripiphoridae Gemminger & Harold, 1870*. Pp. 29, 73–78. In: LÖBL I. & SMETANA A. (eds.): *Catalogue of Palaearctic Coleoptera, Volume 5. Tenebrionoidea*. Apollo Books, Stenstrup, 670 pp.

- BATELKA J. (2008b): *Order Coleoptera, family Ripiphoridae*. Pp. 254–256. In: HARTEN A. van (ed.): *Arthropod fauna of the United Arab Emirates, Volume 1*. Multiply Marketing Consultancy Services, Abu Dhabi, 754 pp.
- BATELKA J. (2011): *Contribution to the synonymies, distributions, and bionomics of the Old World species of Macrosiagon (Coleoptera: Ripiphoridae)*. Acta Entomologica Musei Nationalis Pragae **51**: 587–626.
- BATELKA J. & HOEHN P. (2007): *Report on the host-associations of the genus Macrosiagon (Coleoptera: Ripiphoridae) in Sulawesi (Indonesia)*. Acta Entomologica Musei Nationalis Pragae **47**: 143–152.
- BATELKA J. & STRAKA J. (2011): *Ripiphorus caboverdianus sp. nov. – the first ripiphorid record from the Macaronesian volcanic islands (Coleoptera: Ripiphoridae: Ripiphorinae)*. Zootaxa **2792**: 51–62.
- BESUCHET C. (1956): *Biologie, morphologie et systématique des Rhipidius (Col. Rhipiphoridae)*. Mitteilungen der Schweizerischen Entomologischen Gesellschaft **29**: 73–144.
- GRESSITT J. L. (1941): *Rhipiphoridae from south China (Coleoptera)*. Annals of the Entomological Society of America **34**: 525–536.
- ICZN (1999): *International Code of Zoological Nomenclature, Fourth Edition, adopted by the International Union of Biological Sciences*. International Trust for Zoological Nomenclature, London, xxix + 305 pp.
- PIC M. (1922): *Nouveautés diverses*. Mélanges exotico-entomologiques **37**: 1–32.
- ŠVIHLA V. (2009): *Three new Indasclera species from Laos including new data on distribution and list of species (Coleoptera: Oedemeridae)*. Acta Entomologica Musei Nationalis Pragae **49**: 795–804.

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