

蟲訊 Insect News



香港昆蟲學會通訊

Hong Kong Entomological Society Newsletter



Probstia astoni Wiesner, 2010 艾氏光胸虎甲

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A new species of firefly from Hong Kong — *Pteroptyx maipo* Ballantyne, 2011 米埔屈翅螢

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A description of this new *Pteroptyx* by Ballantyne *et al.* was published in June, 2011. The 27-page, 96-figure article is one of the most comprehensive descriptions of a single new firefly species. As the authors claimed: "The description of the new species (for habitus see Figs 1–6) represents one of the few times in taxonomic history in which all stages of the life cycle of a firefly are presented, together with considerable, detailed, behavioural and ecological data." 30 species of *Pteroptyx* in the world were recognized in the article and the taxonomy of the genus was briefly discussed. A revised key to the Oriental *Pteroptyx* species was also provided. Preview of the article is accessible on *Zootaxa* website: <http://www.mapress.com/zootaxa/2011/f/z02931p034f.pdf>

According to the newspaper reports by Law (2010) and Ma (2010), the firefly was first seen flying in the mangrove habitat of Hong Kong Wetland Park in 2003. The firefly was collected in 2010, sent to Lesley Ballantyne and preliminarily proven to be an unknown species of *Pteroptyx*. On 30th, July, 2010, it was announced on the website of Hong Kong Biodiversity Online, Agricultural, Fisheries and Conservation Department (AFCD) that "The Beetle Working Group of Agriculture, Fisheries and Conservation Department has recently found an unidentified firefly in the Hong Kong Wetland Park. Subsequent taxonomic studies revealed that the firefly belongs to the genus *Pteroptyx* which has not been recorded in China before. Further investigation is underway to determine if the firefly is a new or known species of *Pteroptyx*..." (the announcement was amended at a later date). A small photo of the firefly captioned *Pteroptyx* sp. was also displayed on the same web page. No further information was given. On 15th, September, 2010, Yiu published an observation report of a *Pteroptyx* sp. recorded in Tin Shui Wai and Mai Po. He suspected that it was the same as the one announced by AFCD in July, and proved the taxonomy, morphology, biology and ecology information of this firefly. Subsequently, in late September, Cheng *et al.* published an article, giving brief information about the morphology, taxonomy, habitat and behaviour of a *Pteroptyx* sp.. AFCD also made a press release about this firefly and it was reported in several local newspapers on 23rd September.

As *Pteroptyx* had not been reported in China before, there is not Chinese name currently in use for this genus. Yiu first proposed "屈翅燐螢", meaning "Bent-winged flashing firefly". "燐螢" ("Flashing firefly") is the well accepted Chinese family name of Luciolinae, as this group of fireflies give flashing light, in contrast to Lampyrinae, members of which give off intermittent or continuous light. Shortly after Yiu's proposition, Cheng *et al.* proposed a different Chinese name — "齊燐螢", meaning "synchronous flashing firefly". It was not mentioned in their article why this Chinese name was proposed. Yiu, in a subsequent article, adjusted the Chinese name of this genus to "屈翅螢", and explained that it was derived from the meaning of the Latin name, and that it was consistent with the English common name "Bent-winged firefly". He also commented on the Chinese name proposed by Cheng *et al.* that it was deviated from the meaning of *Pteroptyx* suggested by the original author, and that actually only a few species of the *Pteroptyx* were reported to show synchronous flashing. It is unknown whether the remaining species in the genus display this behaviour, and indeed some species including the only species in China (i.e. *P. maipo*), are known to show no synchronous flashing.

Pteroptyx maipo can be easily recognized by its overall yellowish coloration with darkened elytra tips. The commonly seen *Luciola terminalis* is similar in colour pattern but is much larger, with a body length of 10-12 mm (*P. maipo* being only 6-8 mm). The most distinguishing feature of *P. maipo* is undoubtedly the deflexed elytra of the male, but this feature is only visible when viewed ventrally. When viewed dorsally, female *P. maipo*, have smaller compound eyes and a more tapering posterior end. When viewed ventrally, the difference is obvious, the male has light organs occupying 2 abdominal segments but the female only has 1 abdominal segment occupied by a light organ.



Fig. 1 *Pteroptyx maipo* male, dorsal view



Fig. 2 *Pteroptyx maipo* male, ventral view



Fig. 3 *Pteroptyx maipo* female, dorsal view



Fig. 4 *Pteroptyx maipo* female, ventral view



Fig. 5 *Pteroptyx maipo*, deflexed elytra of male



Fig. 6 *Pteroptyx maipo*, mating pair, left ♀, right ♂

Eggs subglobular, 0.5 mm in diameter. 1st instar larva 1.6 - 2.0 mm long; 2nd instar larva 2.2 - 5 mm long; 3rd instar larva 6-9 mm long; 4th (last) instar larva 9 - 13 mm long.

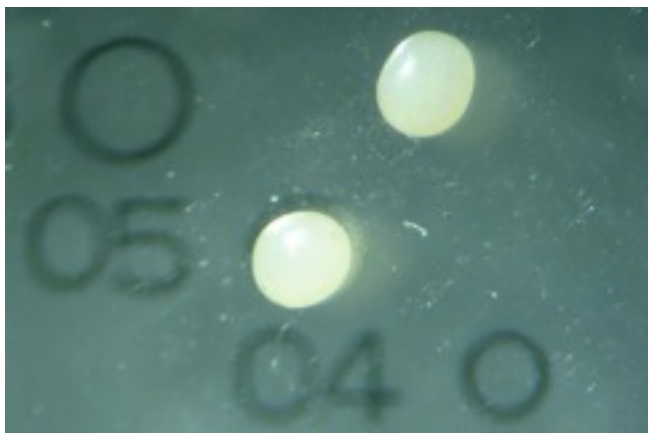


Fig. 7 *Pteroptyx maipo* eggs



Fig. 8 *Pteroptyx maipo* 1st instar larvae attacking an *Assiminea* sp.



Fig. 9 *Pteroptyx maipo* 2nd instar larvae



Fig. 10 *Pteroptyx maipo* 3rd instar larvae



Fig. 11 *Pteroptyx maipo* 4th (last) instar larvae



Fig. 12 *Pteroptyx maipo* 4th (last) instar larvae attacking an *Auriculastra* sp.

In the night time, larvae occasionally glow (no flashing). The light may last for tens of seconds. From the location of light spots observed in over 10 field visits to Tin Shui Wai mangrove habitat, it could be inferred that larvae of *P. maipo* are restricted to the intertidal mudflats which are heavily shaded by mangrove plants. In the day time, a larva was found under a stone embedded in the soil above the intertidal zone. Larvae have observed feeding on 2 small snails — *Assimineia* sp. and *Auriculastra* sp., in the natural environment. Density of these 2 genera of snails is very high in the mangrove habitat of Ramsar site.



Fig. 13 *Pteroptyx maipo*, male pupa ventral view



Fig. 14 *Pteroptyx maipo*, female pupa under the soil, lateral view

About 20 minutes after sunset, adults begin to fly out from the vegetation in the mangrove habitat. In the first hour, they are more frequently seen flying. After that, most of the individuals settle on the vegetation with occasionally short flight. No preference on the plant species was observed. At most, near a dozens of individuals could be seen at one time, at one location. Adults can be seen from late March to October.

So far this firefly was only recorded in several localities within the Ramsar Site, namely Hong Kong Wetland Park, Mai Po Nature Reserve, Tin Shui Wai, near Tsim Bei Tsui; small number were also recorded at the mangrove around outlet of Kam Tin River. Several major mangrove sites had been searched at night, including Nam Chung mangrove, Luk Keng mangrove, Ting Kok mangrove and Pak Tam Chung mangrove, but no *P. maipo* was recorded. Ramsar Site is about 15 km² in area. Within the area, only about 3 km² of area is covered by mangrove and is suitable for the breeding of larvae of *P. maipo*. The adjacent Futian mangrove of Shenzhen may provide an additional 1 km² of suitable habitat, amounting to 4 km² altogether. There is little hope to see a large population around the Pearl River outlet, as almost all coastal land has been modified in the past few decades. Is this 4 km² of mangrove the last breeding site for this firefly? More surveys along other parts of the coastline of Guangdong and Hainan are needed before we can have the answer.



Fig. 15 Habitat of *Pteroptyx maipo* in Tin Shui Wai



Fig. 16 Distribution map of *Pteroptyx maipo*

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A new species of tiger beetle from Hong Kong — *Probstia astoni* Wiesner, 2010 艾氏光胸虎甲

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Type specimens of this new tiger beetle were collected by Paul Aston from Ng Tung Chai in June, 2010. One of the paratypes was stored in Agricultural, Fisheries and Conservation Department collection in the Cheung Sha Wan Government Office. This new *Probstia* species is cordially dedicated to its discoverer, Paul Aston.

According to Wiesner (2010), this is the third described species of this genus, the other two being *Probstia triumphalis* (Horn, 1902) and *P. triumphaloides* (Sawada & Wiesner, 1999). *P. astoni* is the smallest in the genus, with body length 7.7 - 8.6 mm, mean 8.2 mm (without labrum). The other two species have body lengths larger than 9 mm. In Hong Kong, *P. astoni* can be easily recognized by its shining bluish to violet colour, and its sub-square, parallel-sided, moderately round, glabrous pronotum. Its elytra markings consists of a small roundish humeral dot, a small roundish submarginal spot, a small roundish distal spot and a small sub-apical spot; submarginal and distal spots are situated in the same horizontal position. In some specimens two tiny yellow spots are present between them.

Adults of *P. astoni* can be seen in large numbers in May and June, along footpaths near dense woodlands. Besides Ng Tung Chai, it has also been recorded near Shing Mun Reservoir and around Ngau Ngak Shan. It is often found on the ground or on any objects close to the ground. When disturbed, it shows short flight.

**Fig. 1** *Probstia astoni*, front view**Fig. 2** *Probstia astoni*, dorsal view**Fig. 3** *Probstia astoni*, side view**References**

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新發現 NEW FINDINGS

***Lethe chandica* Moore, 1867 (Lepidoptera: Nymphalidae, Satyrinae) – a new record for Hong Kong at Tai Po Kau Headland**Ruy O. BARRETTO¹ & Roger C. KENDRICK²1 - Girassol, Lookout Link, Tai Po, N.T., Hong Kong. ruyb@netvigator.com2 - C & R Wildlife, 129 Lam Tsuen San Tauen, Tai Po, N.T., Hong Kong. hkmoths@gmail.com

Whilst undertaking a general wildlife survey on the 13th June 2011 at Tai Po Kau Headland Conservation Area, the senior author found and photographed 2 specimens of an unfamiliar satyrine butterfly. The first specimen, fresh and undamaged, was observed between 06.20 and 06:30 hrs and photographed (figure 1) on and around a fruiting *Dianella ensifolium* (L.) DC. (Hemerocallidaceae), between dense bamboo (*Indocalamus sinicus* (Hance) Nakai; Poaceae) thickets on the uphill side and to the downhill side a diverse mixture of tall shrubland and mature secondary coastal forest facing east along Girassol Lane (22°26'9"N; 114°11'35"E, 75m elevation). The second specimen was found that night and photographed (figure 2) at about 22.40 hrs in the verandah of Girassol (22°26'14" N; 114°11'35" E, 75m elevation) about 150 metres away. It appeared older, more worn, with a less extensive inner medial fascia at the base of the cell on the forewing underside and had damaged tornus, the butterfly apparently having been attacked by a bird.



Fig. 1 *Lethe chandica* observed in early morning of 13 June 2011 on Girassol Lane, Tai Po Kau Headland, (a) at rest on lily leaf; (b) on fruit of *Dianella ensifolium*.

The photographs were shown to the second author and Philip Lo of KFBG, who both identified the butterflies as *Lethe chandica* Moore, 1867 (Lepidoptera: Nymphalidae, Satyrinae), both males. It is a common species in South China and Hainan, with a distribution extending to Singapore, Borneo and Taiwan (Chou, 2000) and India (Kehimkar, 2008), but apparently these observations are the first and second documented records of this species for Hong Kong. A further specimen of *L. chandica* has been recorded by the Agriculture, Fisheries and Conservation Department of the Hong Kong Special Administrative Area Government from forest in Tai Tam Country Park, also in June 2011 (K.C.Wong, pers. comm.), and a third record from Wu Kau Tang on 24 July (Eddie Yam/seibuhk, pers. comm.), as posted on Hong Kong Wildlife Net - <http://www.hkwildlife.net/viewthread.php?tid=68559>. It is a forest species, the larvae feeds on bamboo (Lo, pers. comm.).

The discovery of *Lethe chandica* is another indication of improving forest quality in Hong Kong following on from examples of other forest species reaching Hong Kong as either new records, or as re-establishing after a long period of absence (e.g. Nicholson, 1996; Bascombe et al, 1999) and further evidence

of the special quality of the forest at Tai Po Kau Headland. Observations and records have been made at Tai Po Kau Headland for over 50 years (Barretto & Kendrick 2006). Efforts to protect the wildlife corridor and ecological linkage for the Conservation Area continue. Tai Po Kau Headland is a unique and biologically highly diverse site which has first records for Hong Kong in respect of plants, birds, moths, such as *Episteme nipalensis* Butler, 1875 (Noctuidae, Agaristinae) in 2008 (Kendrick & Barretto, 2008), *Collinsa spheraria* (Swinhoe, 1892) (Thyrididae, Siculodinae) and *Enrichella pogonias* Bryk, 1947 (Sesiidae, Tinthiinae) in 2010 (Sterling & Kendrick, 2011) and other insects, now including butterflies. The list of butterflies recorded at the Headland has now reached 114 species, including the recently added (from 19th June 2011) *Horaga onyx* (Moore, [1858]) (Lycanidae, Theclinae, Horagini), or Common Onyx, up to four individuals of which were observed and photographed on *Lagerstroemia speciosa* L. (Lythraceae).

Lethe chandica is probably the first addition to Hong Kong's butterfly list since the Central People's Government extended the Convention and Biological Diversity (CBD) to Hong Kong from the 9th May 2011. Hong Kong merits more resources for nature conservation. There needs to be a Biodiversity Strategy and Action Plan for Hong Kong under the CBD. There is a need for an official database established for all insects (the bulk Hong Kong's faunal diversity). It is through work by interested amateurs, non-governmental organisations and academics, in co-operation with Government, that nature conservation, in line with international principles and best practices, can be achieved in Hong Kong.

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Fig. 2 The second *Lethe chandica* individual observed in the evening of 13 June 2011 at Girassol, Tai Po Kau Headland, with a beak shaped piece missing from the tornus of the hindwing.

新發現 NEW FINDINGS

***Noctua pronuba* (Lepidoptera: Noctuidae, Noctuinae) – a new addition to the Hong Kong Lepidoptera fauna.**

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During the course of regular Lepidoptera monitoring in Lam Tsuen Valley, Tai Po (22°27'3"N, 114°8'14"E, approx. 45m elevation), a moth species not recorded previously in Hong Kong (that is for which no documented records exist, C.S.K.Lau, pers. comm.), but familiar to the author from past fieldwork in the United Kingdom, was noted at a 125W mercury vapour light trap on the roof of his home on 16th June 2010. The moth was found upon inspection of the trap contents the following morning, and retained as a voucher specimen (figure 1), now deposited in the insect collection at Kadoorie Farm & Botanic Garden, Tai Po, New Territories, Hong Kong. It was a male *Noctua pronuba* (Linnaeus, 1758) (Lepidoptera: Noctuidae, Noctuinae, Noctuini), identified by comparison to *N. pronuba* illustrated in Skinner (2009). Taxonomy used for Noctuidae herein follows Lafontaine & Schmidt (2010).



Fig. 1 Male specimen of *Noctua pronuba* (Lepidoptera: Noctuidae, Noctuinae) recorded from Lam Tsuen Valley, Tai Po, Hong Kong, 16 June 2010. Colour scale bar = 1 inch, black & white scale bar = 25mm.

Noctua pronuba is a cutworm in its larval stage and is polyphagous, with a wide range of plants utilised, notably herbaceous plants and grasses (Porter, 1997; Copley & Cannings, 2005). Larvae are nocturnal. Pupation occurs in a silken cocoon just below the soil surface (Porter, 1997). The natural distribution of this species is predominantly western Palearctic, from Britain through Europe, western Asia and as far east as the Himalayas (Fibiger, 1997), including Xinjiang Province, western China (Chen, 1999).

The most easterly specimen in The Natural History Museum [BMNH] was from Dharamsala, in northern India (M. Honey, pers. comm.), some 3,600 kilometres from Hong Kong. Although known to be migratory (Skinner, 2009), this distance is almost certainly beyond the normal flight range for this species. Additionally, *N. pronuba* has also established itself, most likely by accidental introduction via horticultural products, in North America (Fibiger, 1997; Copley & Cannings, 2005), where it was first detected in 1979 (Neil, 1981), and has subsequently expanded its range (Lafontaine & Schmidt, 2010) and become a significant pest of various crops (particularly fruits, Brassicaceae and grains) and horticultural products, especially cut flowers (Copley & Cannings, 2005).

The species has the potential to spread, due to adult aestivation through the hottest parts of the year in its natural range (Skinner, 2009), and although it is not naturally found in the tropics or most of the sub-tropics, its life cycle may well be suited to survival in HK. As the moth was recorded at light, the source for the moth will remain a mystery. My own thought is that it is most likely to have arrived as an accidental import via the horticulture trade, as has happened in the past in Hong Kong with another European moth, *Phlogophora meticulosa* (Linnaeus, 1758) (Lepidoptera, Noctuidae, Noctuinae, Phlogophorini), for which there is one voucher specimen in the collection at Tai Lung Experimental Station, Sheung Shui (Agriculture, Fisheries & Conservation Department [AFCD] of the Hong Kong S.A.R. Government), reared in 1981 from a larva found on plants that originated from the Netherlands (record from the notes of the late Kent Li, pers. comm.). If this is the case, then it may be prudent to increase screening of horticultural shipments that have originated from Europe and elsewhere within the natural range of *N. pronuba* and also North America, so as to prevent the establishment of this polyphagous species that has significant potential to cause crop damage in the region.

Acknowledgements

I am indebted to Martin Honey at the BMNH, London, for checking the easternmost distribution of *N. pronuba* based on specimens at the BMNH and pointing out several useful references, as well as to C.S.K. Lau of the Plant Protection Division, AFCD for his correspondence confirming no occurrences known to AFCD of *N. pronuba* in Hong Kong.

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Brief notes of the rearing of *Thaumastopeus nigritus* (Cetoniidae, Cetoniinae) larva

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In Nov 2009, a Scarabaeoidea larva was found in a dead wood in Deep Water Bay, Hong Kong. It was then reared by the author successfully and proved to be a 暗藍花金龜 *Thaumastopeus nigritus* (Cetoniidae, Cetoniinae).

Thaumastopeus nigritus is one of the 14 species of Cetoniinae recorded in Hong Kong (Yiu, 2010). Body length 30-31mm. Its body is entirely black, smooth and shining. The edge of its rostrum is curved with many fine wrinkles. The pronotum is strongly extended and almost covers all the scutellum. The sternal process is slender and curved upward. Adults consume many kind of ripe fruits, e.g. longan (*Euphoria longana*) and figs (*Ficus* spp.) (Yiu, 2010).

In the book *Hong Kong Insect Vol.2* authored by Dr. Dennis S. Hill describes this species as *Thaumastopeus pullus* which is a synonym. He had only one to two records of it. One of his records was of a



Fig. 1 *Thaumastopeus nigritus*, dorsal view



Fig. 2 *Thaumastopeus nigritus*, lateral view

larva found in a piece of dead wood in Wu Kai Sha in the New Territories. This was also recorded them in Yuen Long, Kam Tin, Tai Lam and Fung Yuen of New Territories (Yiu, 2010). The author's record in Deep Water Bay may represent the first published record from Hong Kong Island. The distribution outside Hong Kong includes Guangdong, Guangxi and Yunnan of China; India; Myanmar; Vietnam; Laos; Java; Malaysia and North Thailand.

Some pieces of partially cut dead wood, apparently the result of work done by contractors, were seen on the night of 13th november 2009, along the trail, next to a freshwater stream in Deep Water Bay river valley. A larva was found inside one such piece of dead wood. Tree species not identified. The larva was collected and reared in captivity.



Fig. 3 *Thaumastopeus nigritus*, The edge of its rostrum is curved with many fine wrinkles

觀察報告 OBSERVATION REPORT

Material for rearing stag beetle larvae sold in pet shops specializing in beetles was used to rear the larva. It was kept at room temperature. Water was sprayed on a daily basis in order to maintain optimum moisture. One month later, on 16th December 2009, it started to pupate. The pupation was observed through the transparent container wall. After several days, a spherical cocoon ball made of soil with a diameter of 30mm was formed. The whole setting was then left undisturbed and kept at room temperature.



Fig. 4 Side view of *Thaumastopeus nigrinus* last instar larva



Fig. 5 Dorsal view of *Thaumastopeus nigrinus* last instar larva



Fig. 6 Posterior end of *Thaumastopeus nigrinus* last instar larva

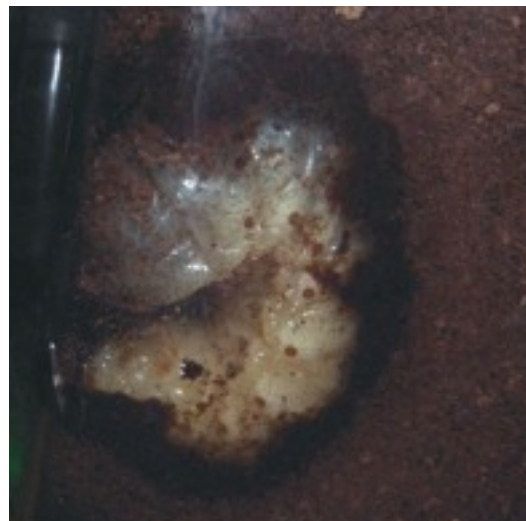


Fig. 7 Pupation room of *Thaumastopeus nigrinus*

觀察報告 OBSERVATION REPORT

After four and a half months, on 9th May 2010, the adult emerged from the substrate. The body length of this individual was 30 mm. A small piece of banana was provided and it ate well. On the morning of 12 May 2010, it was released back into the wild in the same area where it was collected. It excreted a drop of waxy fluid before it flew away.



Fig. 8 Before taken its first flight, the *Thaumastopeus nigritus* excreted a drop of waxy fluid.

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Taxonomy and Systematics – Some clarifications affecting the Hong Kong Lepidoptera fauna and thoughts on insect conservation.

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This short communication is aimed to promote awareness about updates in Lepidoptera from the seemingly remote and obfuscous world of taxonomy. It was prompted by a recent observation in Hong Kong of a snout butterfly (Lepidoptera: Nymphalidae, Libytheinae), claimed by the source from Hong Kong Wetland Park, as "an 11th butterfly family" in Hong Kong, i.e. "Libytheidae" (Anon, 2011). I was sufficiently prompted by the use of taxonomic rank to actually email Lepidoptera contacts in Hong Kong and several key Nymphalidae researchers worldwide. It is a good example of how the knowledge of the phylogenetic systematics of a family have been evolving rapidly over the last few decades, with not all end users of Lepidoptera classification taking sufficient care or effort to follow what has been going on. This attitude has not been aided by other scientific disciplines and funders of science who have, on the whole, a rather disparaging view of classification, seeing it as a rather untrendy, dull discipline that doesn't really cut a good image when compared to fashionable, technology dependent disciplines (and consequently suffers cuts in much needed funding) (Ebach *et al.*, 2011). Members of the Hong Kong Entomological Society [HKES] cover a wide span of interests, but most have some understanding of classification and awareness of its underpinning other biological studies, including the conservation of nature. Without a name for a species, the species will likely have no legal status, and thus be impossible to protect in legislation. Without a name, a species also has less impact upon the general public, and thus less reason for being conserved. Given the state of the biodiversity crisis (e.g. Levin & Levin, 2002; Rogers & Laffoley, 2011), surely it is imperative to describe and name as many currently undescribed species as possible, in order to enhance their protection? Their higher taxonomy and systematics, that is to say the relatedness of each species to one another is also important to understand and assists with identifying taxonomic uniqueness. What needs to be done on our part? We (i.e. the HKES members) need to be informed about current research, and be able to relate the outcomes thereof to whosoever we talk to about the Hong Kong entomological fauna and related issues, particularly its conservation. Having our own clear understanding of a species' taxonomy and its systematics is necessary in communicating these issues.

With these thoughts in mind, I'll get the ball rolling on updates that should be looked at by HKES and then disseminated for ecologists, conservationists, academics, civil servants and so on, to get a better understanding of how we identify with, and conserve, the entomological fauna in Hong Kong. Now that Hong Kong is a signatory to the Convention on Biological Diversity, improving our knowledge of this species rich insect group, as well as progressing with (or starting in some cases) on the rest of the insects deserves more attention (Kilburn & Kendrick, 2011).

Returning to where I started, Nymphalidae represent probably the largest family of butterflies globally. The systematics of the family has a long history of dispute and many of the currently recognised subfamilies have been treated as separate families at some point. However, many works (both morphological and molecular research and reviews, e.g. Erlich & Erlich, 1967; Scott, 1985; Brower, 2000; Wahlberg *et al.*, 2003; Freitas & Brown, 2004; Wahlberg *et al.*, 2005; Peña *et al.*, 2006) over the last few decades have now firmly established Nymphalidae as a large taxon, comprising (within Hong Kong) Libytheinae, Danainae, Charaxinae, Satyrinae, Heliconiinae, Limenitidinae, Pseudergolinae, Biblidinae, Apaturinae, Cyrestinae and Nymphalinae. Please take a look at the Nymphalid Systematics Workgroup website (<http://nymphalidae.utu.fi>) for further details and many more links to Nymphalidae research publications. It seems that there are still people either unaware of this well supported classification, or simply refuse (for whatever reason) to update themselves and carry on learning about phylogenetic relationships. This is not a problem unique to Hong Kong. Since the more recent upheavals in the Noctuoidea (most recently documented in Lafontaine & Schmidt, 2010 and Zahiri *et al.*, 2011) that have been ongoing for the last 15 or so years, traditionally recognised families like the tiger moths (Arctiidae) and tussock moths (Lymantriidae) now sit as subfamilies within the revived Erebidae, which used to be part of Noctuidae (indeed, all three taxa were put in Noctuidae between 2006 and 2010). This demotion of tiger moths and tussock moths to subfamilies has not been well received by some of the more conservative minded moth recording circles in Britain (for example).

The situation is still not resolved, with further molecular and life history works ongoing, hoping to further resolve the phylogeny of the Noctuoidea. Herein lies another problem. The perception of taxonomic stability (or lack thereof) is, I suspect, also a major reason why some more conservative minded people retain the use of more traditional or well established systematics.

A final note: there has been a major review of all Lepidoptera systematics undertaken over the last few years. It has been a large scale collaborative process, and the results will be published shortly (van Nieukerken *et al.*, 2011, in press). Watch out for the next update in the saga of Lepidoptera systematics...

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5. News of insect research (academic or amateur) being conducted locally
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