

異尾華枝蠋 Günther, 1940 (蠋目：長角枝蠋亞科) - 香港新紀錄竹節蟲

Sinophasma mirabile Günther, 1940 (Phasmatodea: Necrosiinae)

- a new record of stick insect from Hong Kong

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引言

華枝蠋屬 (*Sinophasma*) Günther, 1940 是德國人 Klaus Günther 根據在福建省採得的克氏華枝蠋作為此新屬的模式種 (Günther, 1940)。Klaus Günther 同時亦發表三種屬於此新屬的種，分別是採自福建的異尾華枝蠋、浙江的瓦腹華枝蠋以及江西的垂臀華枝蠋。

在 Klaus Günther 建立華枝蠋屬的隨後數十年，國內的竹節蟲學者至今已發表了 22 種關於此屬的新種。此屬現有 26 個種，其中 25 種分佈於中國境內 (Hennemann, Conle & Zhang, 2008; Chen & He, 2008)，只有越北華枝蠋 (Chen & Chen, 1999) 分佈於中國境外。

在香港，根據 Brock & Seow-Choen (2000)、Bi, Zhang & Lau (2001)、Brock (2002)、Ades & Kendrick (2004)、Xu (2005) 及 Hennemann et al. (2008) 的文章，華枝蠋屬並未見報導。本文作者近年來對本地的竹節蟲作出調查研究，在大嶼山及香港島發現 Klaus Günther 所發表的異尾華枝蠋，無疑是香港的新紀錄竹節蟲品種。

縮寫 Abbreviations

字母略寫以代表標本的存放地方 Acronyms used for collections are as follows:

SMTD: Staatliches Museum für Tierkunde, Dresden / Germany

ZMFK: Zoologisches Forschungsinstitut und Museum, Alexander König, Bonn / Germany

GH: Private collection of George, W.C. Ho / Hong Kong

Sinophasma mirabile 異尾華枝蠋

Günther, 1940, Decheniana 237(1): 242, figs. C & J. [holotype ♂, Kuantun (2300m), Wuyishan Mts., Fujian Prov., China, 16.vii.1938. J. Klapperich (ZMFK), allotype ♀, Kuantun (2300m), 17.vii.1938, J. Klapperich (ZMFK), paratype ♂, Kuantun (2300m), 23.vii.1938, J. Klapperich (SMTD)]

Sinophasma mirabile; Chen & He, 1992: 45, fig. 127. Chen & Chen, 1997: 13, figs. S & T, Cai & Chen, 1999: 69. Hennemann, Conle & Zhang, 2008: 37. Chen & He, 2008: 144, fig. 112.

= *Sinophasma crassum*, Chen & He, 1995, Insects of Baishanzu Mt., East. China: 65, fig. 6 [synonymised by Chen & He, 2008: 144].

Material examined:

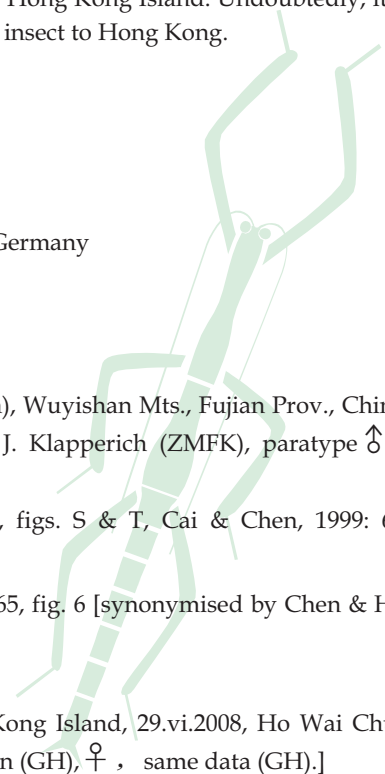
Sinophasma mirabile Günther, 1940 [♀ ♀, Aberdeen Country Park, Hong Kong Island, 29.vi.2008, Ho Wai Chun (GH), ♂ ♂, Lantau North Country Park, Lantau Island, 30.vi.2008, Ho Wai Chun (GH), ♀, same data (GH).]

Introduction

Sinophasma was erected by Klaus Günther (German) in 1940 (Günther, 1940). He described *Sinophasma klapperichi* (from Fujian) and subsequently selected it as the type species for this genus and together with three new undescribed species including *S. mirabile* (from Fujian), *S. hönei* (from Zhejiang) and *S. brevipenne* (from Jiangxi) in his paper.

Twenty-two new species were subsequently described after several decades of the establishment of this genus. Until now, twenty-six species are recognized and mainly distributed over Mainland China (Hennemann, Conle & Zhang, 2008; Chen & He, 2008). Exceptionally, *Sinophasma vietnamense* (Chen & Chen, 1999) is only known from North Vietnam outside China.

According to Brock & Seow-Choen (2000), Bi, Zhang & Lau (2001), Brock (2002), Ades & Kendrick (2004), Xu (2005) and Hennemann et al. (2008), the genus *Sinophasma* Günther, 1940 has not been mentioned in the checklist of Hong Kong. For recent years, the present author has surveyed several areas and has found Günther's *Sinophasma mirabile* in Lantau Island and Hong Kong Island. Undoubtedly, it is a new record of stick insect to Hong Kong.



註釋

存放在ZFMK的雄性個體(根據其模式標本相片及繪圖)，其臀節背板中央處明顯有一小刺突出。在香港所見的個體，雄性的臀節中央處只見粒狀突出物，沒有刺狀突出物。由於異尾華枝蠋亦屬華南地方的廣泛分佈種，相信在其他地方所見的個體亦可能有此特徵及形態上的變化。

描述

雄性(圖一)：整體深綠色，纖細。頭部呈橢圓形，淺棕色，頭頂有六條黑直紋，有單眼，不明顯，位於複眼及觸鬚凹窩之間。眼橢圓形。觸鬚長於前足，細長，棕色。第一節圓柱形，與頭前端緣等長，第二節較第一節短，第三節略長於第一節。

胸部：前胸有一道十字形淺溝，平滑。中胸與中足股節等長，中央有一道明顯的脊，背板及側板有不規則大小的顆粒狀瘤突。後胸包括中節長於頭部及前胸的總和。

腹部：腹節明顯長於頭及胸部的總和，第二至六腹節長度均等，第七節較第六節短，第八節擴展，呈現梯形，第九節延長，較第八節長，臀節是腹部最短節，後緣明顯向內凹入，形成兩側角，角內有齒。尾鬚七首形，基部寬，末端尖，與臀節等長。

翅膀：前翅短，角突鈍及黑色。後翅長，到達第六腹節中部。後翅前緣綠色，臀域玫瑰紅色。

足部：三對足中，後足最長，股節均為深綠色，脛節為橙棕色但端部為黑色。

雌性(圖二)：大部份特徵與雄性相似，體明顯較大。前翅短角突鈍及黑色。後翅較雄性短，只到達第五腹節。腹部第二、四及六節相等，第三節與第五節相等，但短於第二節。第九節及臀節相等，明顯為腹部最短節。臀節後緣U形凹入，肛上板接近三角形。尾鬚圓柱形，基部寬，末端尖鈍。



Comment

For the specimens deposited in ZFMK (by examining images of the type specimens and illustrations), the male (paratype) obviously has a small spine on the middle area of anal tergite. For the male found in Hong Kong, the spine is reduced as a small circle spot on the middle area of the anal tergite. Hence, this variation could probably be found in different individuals in other provinces of south China due to geographical and environmental differences.

Description

Male (Figure 1): Slender body, dull green overall. Head oval, light brown with six vertical black stripes on occiput. Ocelli less distinct. Eye oval. Antennae longer than fore leg. Light brown. First joint cylindrical as long as the apical margin of frons. Second joint shorter than the first joint. The third joint near as long as the first joint.

Thorax: Pronotum smooth, with the transversal and longitudinal sulcus. Mesonotum as long as the mesofemora, with the less distinct median longitudinal carina and irregular size of granules. Metanotum including median segment longer than the head and pronotum together.

圖一：雄性成體異尾華枝蠋

Figure 1: Adult male of *Sinophasma mirabile* Günther

Abdomen: Longer than head and thorax together. Second tergite to sixth tergite are similar in length. The seventh tergite shorter than the sixth tergite. The eighth tergite expand posteriorly, ladder-shaped. Ninth tergite longer than the eighth tergite. The shortest length being at the anal segment. The posterior margin of the anal margin curved inward obviously. Rounded posterolateral angle of apex. Cerci elongate, as long as the anal segment, dagger-like tapering at apex.

Wings: Tegmina short, the elevated portion is black. Wings long, projecting beyond the sixth tergite. Green at costal area and rose at anal area.

Legs: Hind leg is the shortest. Entirely green femora excepting the blackish tip.

Female (Figure 2): Rather stout and similar to male. Tegmina short, the elevated portion is black. Wings shorter than the wings in male, projecting beyond the fifth tergite. The second, fourth and sixth tergite of abdomen are similar in length. The third tergite as long as the fifth tergite but shorter than the second tergite. The ninth tergite as long as the anal segment are the shortest tergites of abdomen. The hind margin of anal segment curved inward, U-shaped. Supra-anal plate with round apex, near triangular. Cerci cylindrical, broader at base and apex pointed.

表一：異尾華枝蠋的體長度 (mm.)

Table 1: Measurement of *Sinophasma mirabile* (mm.)

		雄性 Male	雌性 Female
體長	Length of Body	56	77
前胸	Pronotum	2.5	3
中胸	Mesonotum	9.5	14.5
後胸包括中節	Metanotum including Median segment	7	9
前足股節	Profemora	13.5	14.5
中足股節	Mesofemora	10	11
後足股節	Metafemora	15	15
前足脛節	Protibiae	11.5	12
中足脛節	Mesotibiae	9	9.5
後足脛節	Metatibiae	14	14
觸鬚	Antennae	43	41



圖二：雌性成體異尾華枝蠋

Figure 2: Adult female of *Sinophasma mirabile* Günther

生境

海拔約300至600米，見於成熟林區。

分佈

香港(香港仔郊野公園及北大嶼山郊野公園)及華南各省(廣東、廣西、湖南、福建及浙江)

結語

華枝蟻屬在中國可是一類害蟲，嚴重危害樹林(Chen & Chen, 1997; Chen, 1999)。異尾華枝蟻是新紀錄的竹節蟲品種，其在香港的分佈並不普遍，暫只見於兩處地方，數量稀少，因此未見大量成蟲聚集危害林木的情況。雖然如此，竹節蟲仍然是一種被視為危害林木的昆蟲，應加注意。

Habitat

Attitude between 300 to 600 meters, found in mature woodland.

Distribution

Hong Kong (Aberdeen Country Park and Lantau North Country Park) and South China (Guangdong, Guangxi, Hunan, Fujian and Zhejiang)

Conclusion

In China, *Sinophasma* is regarded as pest insect for woodland (Chen & Chen, 1997; Chen, 1999). *Sinophasma mirabile* is a new record of stick insect, however it is rather uncommon and few in numbers in Hong Kong. No large numbers of adults was observed to destroy the woodland. Even though stick insect is kind of pest insect, we cannot ignore its harmfulness to our environment.

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