

研究簡報

臺灣蝴蝶寄生性天敵名錄

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臺灣產之蝴蝶有記錄者有397種⁽¹⁰⁾；以單位面積而言，名列世界前茅⁽¹⁾。近年來國內之生態保育工作已漸受大眾所重視，而多數蝴蝶屬於大型而美麗之種類，尤其受到重視。因此，行政院農業委員會於1989年將寬尾鳳蝶 (*Aeghana maraho* (Shiraki & Sonan))、珠光鳳蝶 (*Troides magellanus* (C. & R. Felder)) 及大紫蛺蝶 (*Sasakia charonda formosana* Shirozu) 列為瀕臨絕種保育類野生動物；將曙鳳蝶 (*Atrophaneura horishana* (Matsumura)) 與黃裳鳳蝶 (*Troides aeacus kaguya* (Nakahara & Esaki)) 列為珍貴稀有保育類野生動物⁽²⁾。

寄生性天敵乃控制蝴蝶族群很重要之生物因子，近年來由於蝴蝶館之設置十分普遍，館內通常繁殖了一些大型、美麗之蝴蝶作為展示重點；但由於寄生性天敵的寄生，使得飼養工作遭受嚴重干擾。因此對於蝴蝶寄生性天敵的瞭解，有助於蝴蝶園的經營管理；而且對

於保育種蝴蝶的復育工作亦十分重要。每一種蝴蝶應有其寄生性天敵，而在臺灣至今僅有21種蝴蝶共約有23種寄生性天敵之記錄^(3,4,5-9,11)(表一)；因此寄生性天敵乃蝴蝶研究之重點工作之一。

本文乃筆者等近年來採集飼育之結果，加上整理文獻記錄而成之臺灣蝴蝶寄生性天敵名錄，希冀此能提供今後研究蝴蝶之基本資料。本名錄所記錄之蝴蝶共有5科、44種；寄生性天敵有2目、9科、33屬、46種(表一)。由表一可知筆者等首次自34種蝴蝶飼育得各該種蝴蝶臺灣以往未曾記錄之寄生性天敵，這些寄生性天敵總計有2目、8科，約26屬、32種；其中黑卵蜂科之 *Telenomus talaus* Nixon 與 *T. parnarae* Wu & Chen，及寄生蠅科之 *Halydaia luteicornis* (Walker) 且為臺灣新記錄種。

筆者等飼育蝴蝶寄生性天敵時亦首次發現寄生單帶弄蝶 (*Parnara guttata* (Bremer & Grey)) 之 *Casinaria pedunculata*

表一、臺灣蝴蝶寄生性天敵名錄

Table 1. List of parasitoids of Taiwanese butterflies

Butterflies	Parasitoids			
	Family ¹⁾	Species	References	
Hesperiidae				
<i>Borbo cinnara</i> (Wallace)	Ichn.	<i>Xanthopimpla flavolineata</i> Cameron	11	
	Ichn.	<i>Itopectis naranyae</i> (Ashmead)	11	
	Ichn.	<i>Casinaria pedunculata</i> (Szépligeti)	11	
	Chal.	<i>Brachymeria euplaeae</i> Westwood	11	
	Scel.	<i>Telenomus parnae</i> Wu & Chen	New record	
<i>Erionota torus</i> Evans	Brac.	<i>Cotesia erionotae</i> (Wilkinson)	4	
	Ency.	<i>Ooencyrtus</i> sp.	New Record	
	Elas.	<i>Elasmus philippinensis</i> Ashmead	6	
<i>Parnara guttata</i> (Bremer & Grey)	Tach.	<i>Argyrophylax nigrotibialis</i> Baranov	7	
	Tach.	<i>Exorista japonica</i> (Townsend)	New Record	
	Tach.	<i>Halydaia luteicornis</i> (Walker)	New Record	
	Tach.	<i>Masicera oculata</i> Baranov	7	
	Tach.	<i>Thecocarcelia thrix</i> Townsend	New Record	
	Ichn.	<i>Casinaria pedunculata</i> (Szépligeti)	New Record	
	Ichn.	<i>Charops bicolor</i> (Szépligeti)	New Record	
	Ichn.	<i>Coccygomimus parnae</i> (Viereck)	7	
	Ichn.	<i>Goryphus basilaris</i> Holmgren	New Record	
	Ichn.	<i>Leptobatopsis indica</i> (Cameron)	New Record	
	Ichn.	<i>Xanthopimpla punctata</i> (Fabricius)	New Record	
	Brac.	<i>Apanteles baoris</i> Wilkinson	9	
	Chal.	<i>Brachymeria obscurata</i> Walker	7	
	Tric.	<i>Trichogramma dendrolimi</i> Matsumura	7	
	Tric.	<i>Trichogramma japonicum</i> Ashmead	7	
	Scel.	<i>Telenomus parnae</i> Wu & Chen	New Record	
	<i>Pelopidas mathias oberthueri</i> Evans	Ichn.	<i>Ischnojoppa luteator</i> (Fabricius)	New Record
		Chal.	<i>Brachymeria obscurata</i> Walker	7
		Chal.	<i>Brachymeria euplaeae</i> Westwood	11
		Tric.	<i>Trichogramma chilonis</i> Ishii	11
<i>Potanthus confucius angustatus</i> (Matsumura)	Tric.	<i>Trichogramma chilonis</i> Ishii	11	
<i>Suastus gremius</i> (Fabricius)	Brac.	<i>Bracon</i> sp.	New Record	
	Scel.	<i>Telenomus parnae</i> Wu & Chen	New Record	
<i>Telicota bambusae horisha</i> Evans	Tric.	<i>Trichogramma chilonis</i> Ishii	11	
<i>Telicota ohara formosana</i> Fruhstorfer	Brac.	<i>Dolichogenidea</i> sp.	New Record	
<i>Udaspes folus</i> Cramer	Brac.	<i>Cotesia erionotae</i> (Wilkinson)	4	
	Tric.	<i>Trichogramma chilonis</i> Ishii	11	
Papilionidae				
<i>Byasa alcinous mansonensis</i> (Fruhstorfer)	Ichn.	<i>Theronia zebra diluta</i> Gupta	New Record	
	Brac.	<i>Glyptapanteles</i> sp. 1	New Record	
	Chal.	<i>Neochalcis breviceps</i> (Masi)	New Record	
	Scel.	<i>Telenomus talaus</i> Nixon	New Record	

表一、(續) Table 1. (Continued)

<i>Byasa impediens febanus</i> (Fruhstorfer)	Chal.	<i>Neochalcis breviceps</i> (Masi)	New Record
<i>Byasa polyeuctes termessus</i> (Fruhstorfer)	Ichn. Brac.	<i>Theronia zebra diluta</i> Gupta <i>Glyptapanteles</i> sp. 1	New Record New Record
<i>Graphium sarpedon connectens</i> (Fruhstorfer)	Chal.	<i>Neochalcis breviceps</i> (Masi) <i>Brachymeria obscurata</i> Walker	New Record 7
<i>Papilio demoleus libanius</i> Fruhstorfer	Tach. Ichn. Ency. Pter. Tric. Scel.	<i>Exorista sorbillans</i> Wiedemann <i>Melalophacharops papilionis</i> Ashmead <i>Ooencyrtus</i> sp. <i>Pteromalus puparum</i> (L.) <i>Trichogramma chilonis</i> Ishii <i>Telenomus talaus</i> Nixon	7 7 New Record 11 7 New Record
<i>Papilio helenus fortuneus</i> Fruhstorfer	Ichn. Pter.	<i>Holcojoppa formosana</i> (Matsumura) <i>Pteromalus puparum</i> (L.)	New Record New Record
<i>Papilio memnon heronus</i> Fruhstorfer	Ichn. Pter. Tric. Scel.	<i>Xanthopimpla punctata</i> (Fabricius) <i>Pteromalus puparum</i> (L.) <i>Trichogramma chilonis</i> Ishii <i>Telenomus talaus</i> Nixon	8 11 New Record New Record
<i>Papilio polytes pasikrates</i> Fruhstorfer	Ichn. Ency. Pter.	<i>Holcojoppa formosana</i> (Matsumura) <i>Ooencyrtus</i> sp. <i>Pteromalus puparum</i> (L.)	New Record New Record 11
<i>Papilio polycctor thrasymedes</i> Fruhstorfer	Ichn. Pter. Scel.	<i>Holcojoppa formosana</i> (Matsumura) <i>Pteromalus puparum</i> (L.) <i>Telenomus talaus</i> Nixon	New Record 11 New Record
<i>Papilio protenor amauro</i> Jordan	Pter.	<i>Pteromalus puparum</i> (L.)	11
<i>Papilio thaiwanus</i> Rothschild	Pter.	<i>Pteromalus puparum</i> (L.)	11
<i>Papilio xuthus</i> L.	Cera. Ichn. Pter. Ency. Tric. Scel.	<i>Forcipoomyia hirtipes</i> de Meijere <i>Holcojoppa formosana</i> (Matsumura) <i>Pteromalus puparum</i> (L.) <i>Ooencyrtus</i> sp. <i>Trichogramma chilonis</i> Ishiii <i>Telenomus talaus</i> Nixon	7 New Record 11 New Record New Record New Record
<i>Troides aeacus kaguya</i> (Nakahara & Esaki)	Brac.	<i>Glyptapanteles</i> sp. 1	New Record
Lycaenidae			
<i>Acytolepis puspa myla</i> (Fruhstorfer)	Ichn.	Ichneumonidae sp.	New Record
<i>Arhopala paramuta horishana</i> Matsumura	Brac.	<i>Apanteles</i> sp.	New Record
<i>Everes argiades hellotia</i> Ménériès	Ichn.	<i>Neotypus nobilitator orientalis</i> Uchida	7
<i>Heliophorus ila matsumurae</i> (Fruhstorfer)	Brac.	<i>Glyptapanteles</i> sp. 3	New Record
<i>Lampides boeticus</i> (L.)	Tric.	<i>Trichogramma japonicum</i> Ashmead	7
Pieridae			
<i>Eurema hecabe</i> (L.)	Chal.	<i>Brachymeria obscurata</i> Walker	7

表一、(續) Table 1. (Continued)

<i>Gonepteryx amintha</i>	Brac.	<i>Cotesia</i> sp. 2	New Record
<i>formosana</i> (Fruhstorfer)			
<i>Hebomoia glaucippe</i>	Ency.	<i>Ooencyrtus</i> sp.	New Record
<i>formosana</i> Fruhstorfer			
<i>Pieris rapae crucivora</i>	Tach.	<i>Exorista sorbillans</i> Wiedemann	New Record
(Boisduval)	Ichn.	<i>Coccygomimus nipponicus</i> (Uchida)	7
	Brac.	<i>Cotesia glomerata</i> (L.)	3
	Chal.	<i>Brachymeria obscurata</i> Walker	5
	Pter.	<i>Pteromalus puparum</i> (L.)	5
Nymphalidae			
<i>Acraea issoria</i>	Chal.	<i>Brachymeria alternipes</i> (Walker)	New Record
<i>formosana</i> (Fruhstorfer)			
<i>Argyreus hyperbius</i> (L.)	Tach.	<i>Sturmia</i> sp.	New Record
<i>Danaus chrysippus</i> (L.)	Tric.	<i>Trichogramma chilonis</i> Ishii	New Record
<i>Euthalia formosana</i>	Brac.	<i>Cotesia</i> sp. 1	New Record
Fruhstorfer			
<i>Elymnias hypermnestra</i>	Brac.	<i>Cotesia</i> sp. 1	New Record
<i>hainana</i> Moore	Chal.	<i>Brachymeria euplaeae</i> Westwood	11
<i>Euploea eunice hobsoni</i>	Ichn.	<i>Theronia zebra diluta</i> Gupta	11
(Butler)	Chal.	<i>Brachymeria euplaeae</i> Westwood	11
<i>Ideopsis similis</i> (L.)	Ichn.	<i>Melalophacharops papilionis</i> (Ashmead)	New Record
<i>Kallima inachus</i>	Tach.	<i>Blepharipa</i> sp.	New Record
<i>formosana</i> Fruhstorfer			
<i>Kaniska canace drilon</i>	Brac.	<i>Glyptapanteles</i> sp. 2	New Record
(Fruhstorfer)			
<i>Polyura eudamippus</i>	Scel.	<i>Telenomus talaus</i> Nixon	New Record
<i>formosana</i> (Rothschild)			
<i>Polyura narcaea</i>	Scel.	<i>Telenomus talaus</i> Nixon	New Record
<i>meghaduta</i> (Fruhstorfer)			
<i>Tirumala limniace</i>	Ichn.	<i>Melalophacharops papilionis</i> (Ashmead)	New Record
(Cramer)			
<i>Vanessa indica</i> (Herbst)	Tach.	Tachinidae sp.	New Record

¹⁾ Cera.=Ceratopogonidae; Tach.=Tachinidae; Ichn.=Ichneumonidae; Brac.=Braconidae; Chal.=Chalcididae; Ency.=Encyrtidae; Pter.=Pteromalidae; Tric.=Trichogrammatidae; Scel.=Scelionidae.

(Szépligeti) 有重複寄生蜂 *Brachymeria excarinata* (Gahan) 與 *B. lasus* (Walker) , 寄生麝香鳳蝶 (*Byasa alcinous mansonensis* (Fruhstorfer)) 之 *Glyptapanteles* sp. 有重複寄生蜂 *Mokrzeckia orientalis* Subba Rao 。

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(關鍵詞：蝴蝶、寄生性天敵、臺灣)

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ABSTRACT

Chou, L. Y.¹, Yang, P. S.², and Ho, J. Z.³ 1994. List of parasitoids of Taiwanese butterflies. Plant Prot. Bull. 36:327-331. (¹ Department of Applied Zoology, Taiwan Agricultural Research Institute, Wufeng, Taichung, Taiwan, ROC; ² Department of Plant Pathology and Entomology, National Taiwan University, Taipei, ROC; ³ Department of Management, Taiwan Endemic Species Research Institute, Chichi, Nantou, Taiwan, ROC)

Forty-six species of primary parasitoids and 3 hyperparasitoids from 44 species of Taiwanese butterflies are recorded in this paper. Among them, thirty-two species reared from 34 species of butterflies are reported in this paper for the first time. Three species, *Telenomus talaus* Nixon, *T. parnarae* Wu & Chen (Scelionidae) and *Halydaia luteicornis* (Walker) (Tachinidae) are new to Taiwan.

(Key words: butterflies, parasitoids, Taiwan)