



CONSERVE IT

一切從認識開始

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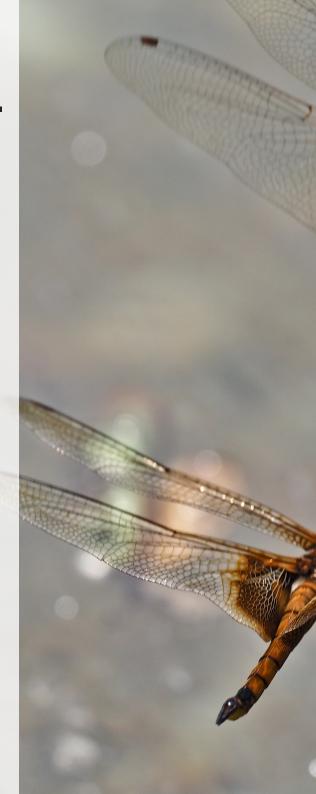
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品種介紹 Species information

圖片資料 PICTURE INFO.

封面: 黃蜻 - 雌性 簡介: 華斜痣蜻 - 雄性(前)和雌性(後)

Cover: Wandering Glider - Female Introduction: Saddlebag Glider -Male(Front) & Female(Back)

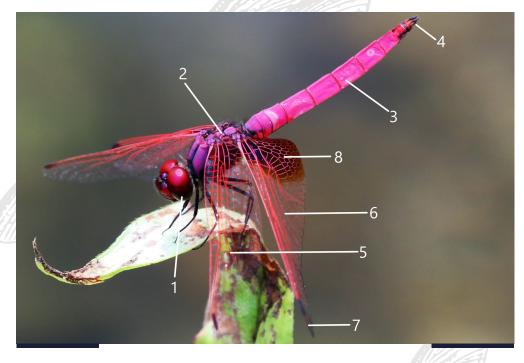




簡介 INTRODUCTION

Approximately 130 species Odonata species have been recorded in Hong Kong. You may think that in order to see the colorful dragonflies (dragonflies and damselflies), you have to visit the remote countryside. In fact, it is not difficult to find them in urban parks of our city. By reading this booklet, the authors hope you basic information of will gain dragonflies and will start to them. This appreciate booklet introduces the body structure of dragonflies, their life cycle and common species in urban area. You think that dragonfly conservation is an issue far from your reach. Actually, simple actions, such as cherishing water resources and avoidance of polluting rivers and ponds, already help dragonfly conservation.

蜻蜓的身體結構 BODY STRUCTURE OF A DRAGONFLY



1	複眼	Compound eye
2	合胸	Synthorax
3	腹部	Abdomen
4	肛附器	Anal appendage
5	前翅	Forewing
6	後翅	Hindwing
7	翅尖	Tip of the wing
8	翅基	Base of the wing

如何分辨蜻蜓和豆娘

HOW TO DIFFERENTIATE BETWEEN DRAGONFLY AND DAMSELFLY

蜻蜓(差翅亞目)

- 前後翅形狀有明顯 分別
- 除春蜓科外,雙眼距離較近

Dragonfly (Anisoptera)

- Shape of forewings and hindwings apparently different
- Shorter distance between the two compound eyes, except for Gomphidae



Dan e s

豆娘(束翅亞目)

- 前後翅形狀相似
- 雙眼明顯分開

Damselfly (Zygoptera)

- Shape of forewings and hindwings similar
- Two compound eyes widely separated





1. 稚蟲 Larva

大部分蜻蛉目的稚蟲是水生的。由一齡至終齡,部分品種的稚蟲可蛻皮多達十五次。蜻蛉目的稚蟲是肉食性的,可捕食其他水生昆蟲、蝌蚪,甚至小魚。上圖是兩種蜻蜓(差翅亞目)的稚蟲。

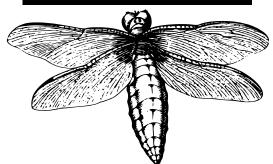
Most larvae of Odonata are aquatic. From the first to the last instar, individuals of some species could moult up to fifteen times. Larvae of Odonata are carnivorous. They prey on aquatic insects, tadpoles, and even small fish. Photos above are the larvae of two species of dragonflies (Anisoptera) respectively.

2. 羽化 Emergence

羽化是指稚蟲蛻變為成蟲的過程,通常 見於清晨及黃昏。剛羽化的個體身體柔 軟,顏色較淡。下圖是剛羽化的褐斑異 痣螺。枝條上的是牠的蛻。

Emergence is a process in which the larva transforms into an adult. This process usually occurs during dawn and dusk. Bodies of freshly emerged individuals are soft, and with paler color. The photo below is a freshly emerged Common Bluetail. Its exuviae can be found on the stem.

蜻蜓的生命週期LIFECYCLE OF A DRAGONFLY









3.1. 捕食 Predation

蜻蛉目成蟲通常會捕食比自己小的昆 蟲,包括較小的蜻蛉目品種。上圖分別 展示了進食中的赤褐灰蜻和捕食其他蜻 蜓的狹腹灰蜻。

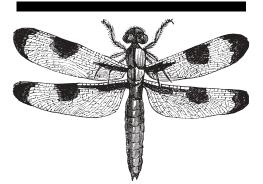
Adults of Odonata usually prey on insects smaller than themselves, including smaller Odonata species. Photos above demonstrate a Common Red Skimmer having its meal and a Green Skimmer feeding on another dragonfly.

3.2. 被捕食 As a Prey

位於食物鏈的中層,蜻蛉目成員成為較高層捕獵者的食物。下圖(攝於台灣) 是赤褐灰蜻被蜘蛛捕食的場景。

In the middle of the food chain, Odonata are prey for predators from upper levels. The photo below (taken in Taiwan) shows the scene of a Common Red Skimmer being eaten by a spider.

蜻蜓的生命週期 LIFE CYCLE OF A DRAGONFLY









3.3. 繁殖 Reproduction

上圖是正在交配的赤褐灰蜻。其後,雄 蟲守著即將產卵的雌蟲。

The photo above is a mating pair of Common Red Skimmers. After that, the male guards the female, which is going to lay eggs.

不是所有蜻蛉目品種都採用點水式產 卵。豆娘和蜻蜓中的蜓科有鋸形產卵 管,並把卵如下圖般產在泥土或植物 內。

Not all Odonata species adopt exophytic oviposition, such as by dipping the abdomen into water. Damselflies (Zygoptera) and Aeshnids, belonging to a family of dragonflies (Anisoptera), have saw-like ovipositor, allowing them to lay eggs into soil or plants.









3.4. 老熟 Aged

老熟的個體身上會展示不同的特徵,例 如煙翅綠色蟌合胸和腹部末端會大範圍 披上白色粉霜。

Aged individuals may show different body features, for example the synthorax and abdomen tip becoming pruinose white to a large extent in Indochinese Copperwing.

鼎脈灰蜻雌蟲合胸背面和腹部披上藍色 粉霜。

Synthorax dorsum and abdomen becoming pruinose blue in female of Lesser Blue Skimmer.







翠胸黃蟌

體長: 33-41 mm 在香港的飛行期: 三至十一月

辨認特徵:

1. 眼綠色

2. 合胸綠色

3. 腹部橙色

Body length: 33-41 mm Flight period in HK: March to November

Identification features (male):

1. Green Eyes

2. Green Synthorax

3. Orange Abdomen





複斑異痣螈

體長: 28-30 mm 在香港的飛行期: 全年可見

辨認特徵(雄):

1. 合胸底色綠色或 藍色

2.腹部接近末端的位 置有藍色斑 Body length: 28-30 mm Flight period in HK: throughout the year

- 1. Green or blue synthorax
- 2. Blue marking near the end of the abdomen





丹J真斑蟌

體長: ~37mm 在香港的飛行期: 全年可見

辨認特徵(雄):

- 1.面部主要橙色
- 2. 合胸背面橙綠色

Body length: ∼37mm Flight period in HK: throughout the year

- Mainly orange on frons
- 2. Orangish green dorsum of synthorax





碧偉蜓

體長: 68-76 mm 在香港的飛行期: 三至十二月

辨認特徵:

- 1.合胸綠色
- 2.腹部的斑為條狀

Body length: 68-76 mm Flight period in HK: March to December

Identification features:

- 1. Green Synthorax
- 2. Strip-like markings on abdomen





紋藍小蜻

體長: 29-32 mm 在香港的飛行期: 三至十二月

辨認特徵(雄):

- 1.合胸和腹部主要 藍色
- 2.肛附器白色

Body length: 29-32 mm Flight period in HK: March to December

Identification features (male):

- 1. Mainly blue on synthorax and abdomen
- 2. White anal appendages

(雌)(FEMALE)
知多一點:與大部分蜻蛉目品種不同,紋藍小蜻的 羽化高峰期是夏末至初秋。 To know more: Different from most other Odonata species, the peak of emergence for Blue Percher is from the end of summer to early autumn.



赤褐灰蜻

體長: 46-50 mm 在香港的飛行期: 全年可見

辨認特徵(雄):

- 1.面部深褐色
- 2.合胸灰藍色
- 3.腹部粉紅色

Body length: 46-50 mm Flight period in HK: throughout the year

- 1. Dark brown Frons
- 2. Grey blue synthorax
- 3. Pink abdomen





WANDERING GLIDE

體長: 49-50 mm 在香港的飛行期: 全年可見

辨認特徵:

- 1.合胸黃褐色
- 2.腹部接近末端的位 置有水滴形黑斑

Body length: 49-50 mm Flight period in HK: throughout the year

Identification features:

- 1. Yellowish brown Synthorax
- 2. Tear-shape black markings near the end of the abdomen





體長: 44-46 mm 在香港的飛行期:

二至九月

辨認特徵(雄):

1.合胸和腹部主要 黑色

2.腹部有一道粗白帶

Body length: 44-46 mm Flight period in HK: February to September

- 1. Mainly black on synthorax and abdomen
- 2. Thick white stripe on the abdomen





E 主余头点, 电 體長: 53-56 mm 在香港的飛行期:

四至十二月

辨認特徵(雄):

1.後翅翅基有大範圍 紅色斑

2.腹部末端有黑色斑

Body length: 53-56 mm Flight period in HK: April to December

- Large area of red markings at the base of hindwings
- 2. Black marking at the end of the abdomen





體長: 33-35 mm 在香港的飛行期: 全年可見

辨認特徵(雄): 1. 合胸和腹部紫紅色 Body length: 33-35 mm Flight period in HK: throughout the year

Identification features (male): 1. Purplish red synthorax

and abdomen

(雌) (FEMALE)

知多一點: 曉褐蜻在陽光猛烈的時候, 會把腹部舉 起,以減少腹部被陽光照射的面積來避免過熱。 To know more: When there is intense sunlight, Crimson Dropwing raises its abdomen towards

the sun, so as to reduce the surface area of body receiving sunlight. This prevents it from overheating.

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觀賞蜻蜓的注意事項

- 1.注意安全,不要走進河道、水池等有潛在危險的地方
- 2.做好防蚊措施,建議穿著長袖上衣和長褲,並塗上驅蚊劑
- 3. 不捕捉蜻蜓
- 4.不走近羽化中的蜻蜓
- 5.不污染蜻蜓棲息地
- 6.尊重別人
- 7.可用望遠鏡協助觀察,並用紙筆或拍攝記錄

Precautions for Dragonfly Observation

- 1. Be safe. Don't access to potentially dangerous places such as rivers and pools
- 2. To prevent mosquito bite, it is recommended to wear long-sleeved clothes and trousers, and to apply mosquito repellent
- 3. Don't catch or collect dragonflies
- 4. Don't get close to emerging dragonflies
- 5. Don't pollute the habitats of dragonflies
- 6. Respect others
- 7.Can use binoculars for observation, and records by photographs and notes



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