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DRAGONFLIES AND DAMSELFLIES OF CHINA

中国蜻蜓大图鉴

— 张浩淼 著 —

HAOMIAO ZHANG

下册 Vol.2

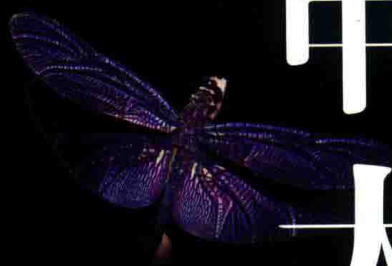


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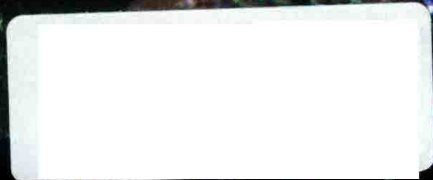
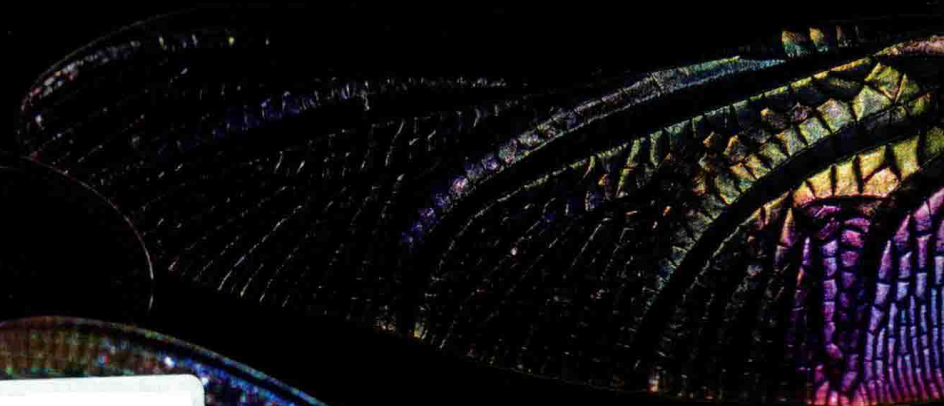
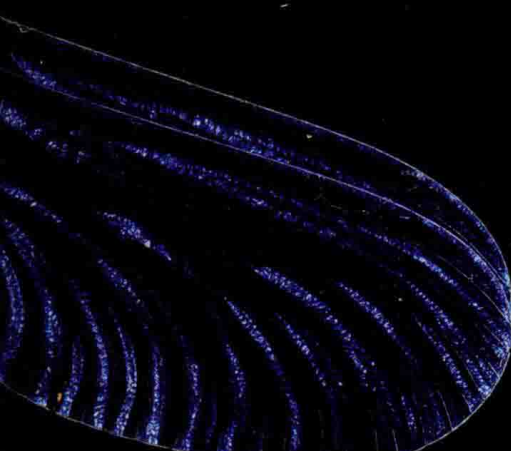
中国蜻蜓 大图鉴

DRAGONFLIES AND
DAMSELFLIES OF CHINA

— 张浩淼 著 —

HAOMIAO ZHANG

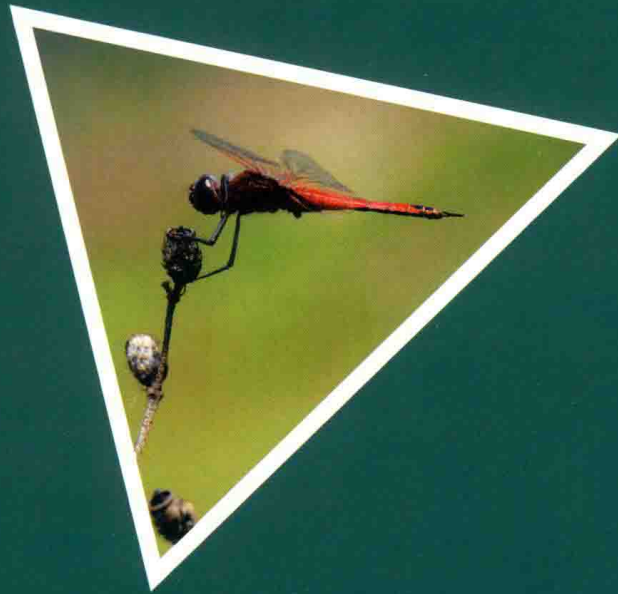
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差翅亚目

SUBORDER ANISOPTERA



8

蜻科

Family Libellulidae

本科世界性分布，全球已知142属1000余种，是蜻蜓目最庞大的一个科。中国已经发现42属140余种。本科蜻蜓有些体型很小，如侏红小蜻，是全球最小型的蜻蜓之一，有些体型也很巨大，如彩虹蜻；但多数是中型身材。大部分种类体色非常艳丽，色彩丰富，体形千姿百态，是蜻蜓目中观赏性最高的一类。多数种类通过身体色彩即可以识别，少数较相似的种类可以通过肛附器、钩片及下生殖板构造来区分。

本科蜻蜓主要栖息于各种静水水域，在水草茂盛的湿地种类繁多。少数种类生活在溪流、河流等流水环境。雄性具有显著的领域行为，在晴朗的天气，通常停落在水面附近占据领地，有些种类具有长时间悬停飞行的本领。雌性不常见，仅在产卵时才会靠近水面。

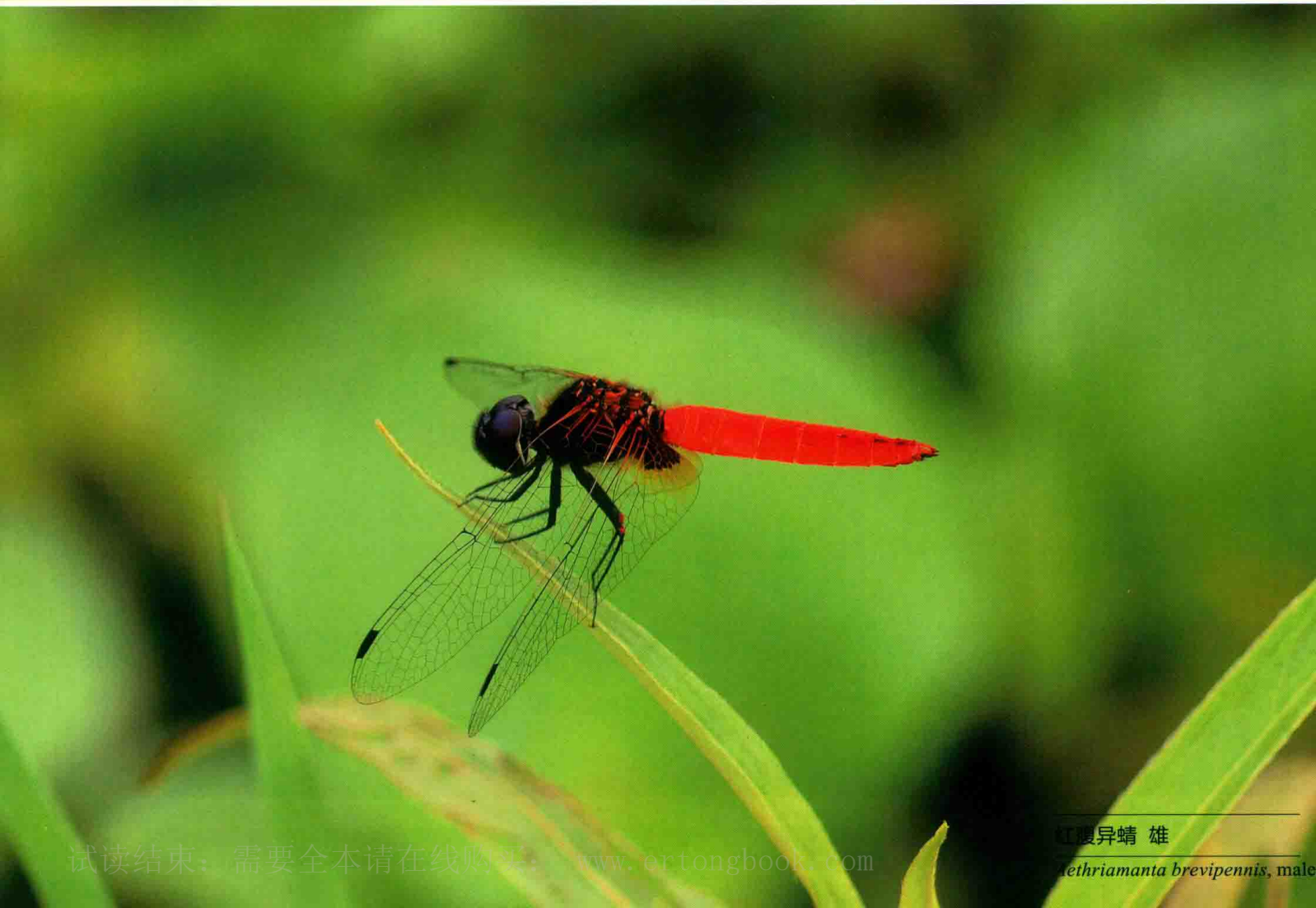
This, the largest family of Odonata is distributed worldwide with over a thousand species in 142 genera. Over 140 species in 42 genera are currently known from China. Their body size is variable, some of them are among the smallest of anisopterous dragonflies, e. g. *Nannophya pygmaea*, others are large, e. g. *Zygonyx iris*, but most species are medium-sized. The majority of species possess brilliant colours and the shape of the body widely varies. They are among the most recognizable dragonflies of the order. Most species can be identified in the field by their unique color patterns, some species are similar and must be identified by morphology of the male anal appendages, hamulus and female vulvar lamina.

Libellulids frequently occur at standing water habitats including marshes, swamps and ponds with plenty of aquatic plants. A few species are found along streams and rivers. Males often exhibit territorial behavior by perching close to water's margin and darting out when confronting an intruder and returning to its perch, some species can hover for long periods. Females are less frequently seen and only approach the water to lay eggs.



晓褐蜻 雄

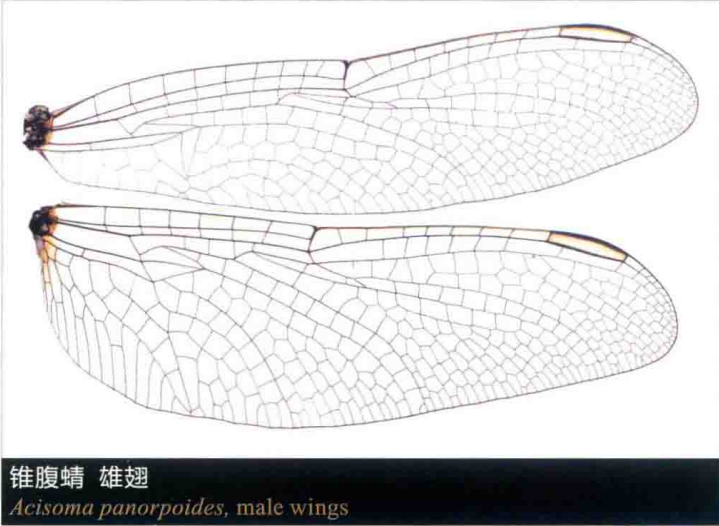
Trithemis aurora, male



红腹异蜻 雄

Aethriamanta brevipennis, male

锥腹蜻属 Genus *Acisoma* Rambur, 1842



锥腹蜻 雄翅

Acisoma panorpoides, male wings

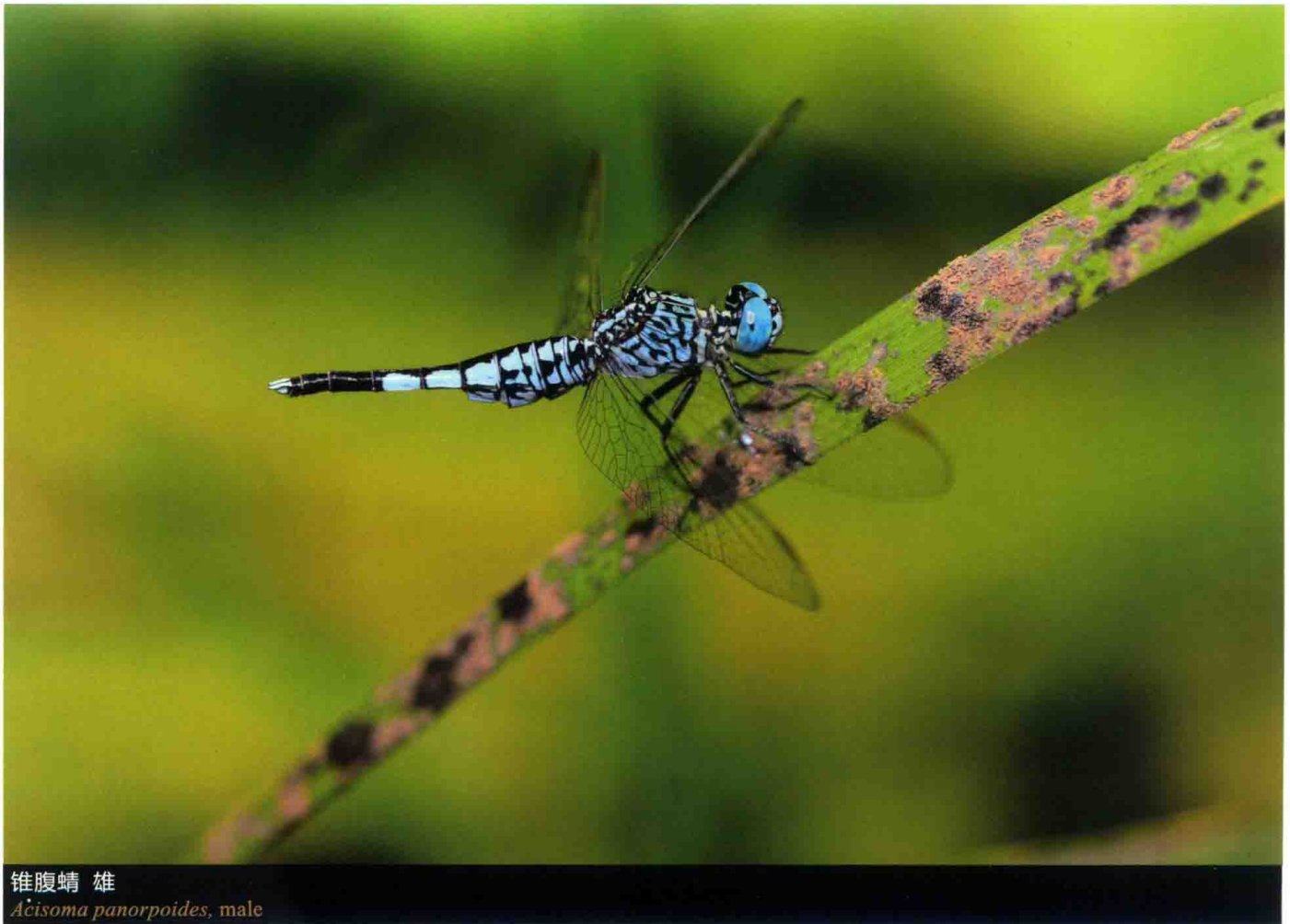
small-sized, abdomen is strongly inflated basally. Wings hyaline with pale and long pterostigma, arc between antenodals 1 and 2, the distal antenodal incomplete, discoidal field with 1-2 rows of cells basally, cubital space with one crossvein, anal loop boot-shaped, base of triangle in hind wing at the level of arc.

Acisoma species inhabit standing water habitats, including marshes and ponds, the adults usually perch in the grass.

本属全球已知6种,广泛分布于亚洲和非洲。中国已知1种,分布广泛且常见。本属是体型细小的蜻科物种,腹部呈锥形;翅透明,翅痣较长但色彩较淡,弓脉位于第1条与第2条结前横脉之间,最末端的结前横脉不完整,盘区基方具1~2列翅室,基臀区具1条横脉,臀圈靴状,后翅三角室的基边与弓脉的位置相当。

本属蜻蜓栖息于水草茂盛的湿地、沼泽地等静水环境,经常隐藏在茂盛的植物丛中。

The genus contains six species, widespread in Asia and Africa. One species is recorded from China, common and widespread. Species of the genus are



锥腹蜻 雄

Acisoma panorpoides, male

锥腹蜻 *Acisoma panorpoides* Rambur, 1842

【形态特征】雄性复眼蓝色，面部蓝白色；胸部蓝白色，布满黑色细条纹，翅透明；腹部基方半部膨胀，前7节主要蓝白色并具黑色斑纹，后3节黑色。雌性复眼绿色，身体黄色具黑色斑纹。【长度】体长 25~28 mm，腹长 16~18 mm，后翅 19~20 mm。【栖息环境】海拔 2500 m 以下水草茂盛的沼泽、池塘和水稻田。【分布】广泛分布于中国南方；亚洲广布。【飞行期】全年可见。

[**Identification**] Male eyes blue, face bluish white. Thorax bluish white with fine black stripes, wings hyaline. Abdomen with basal half inflated, basal seven segments bluish white with black markings, distal three segments black. Female eyes green, body yellow with black markings. [**Measurements**] Total length 25-28 mm, abdomen 16-18 mm, hind wing 19-20 mm. [**Habitat**] Marshes, ponds and paddy fields below 2500 m elevation. [**Distribution**] Widespread in the south of China; Widespread in Asia. [**Flight Season**] Throughout the year.



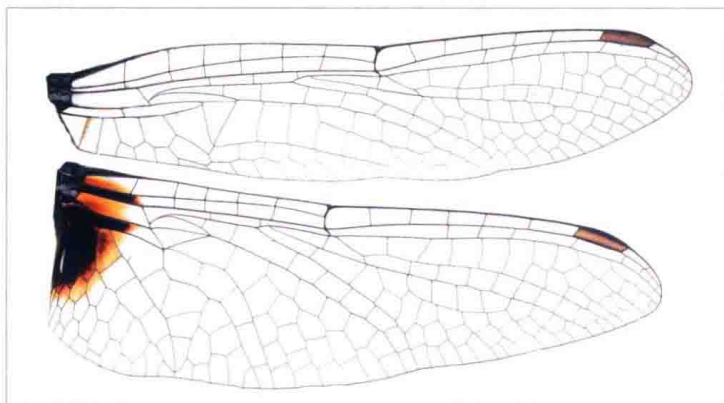
锥腹蜻 雄, 云南(德宏)
Acisoma panorpoides, male from Yunnan (Dehong)



锥腹蜻 雌, 云南(德宏)
Acisoma panorpoides, female from Yunnan (Dehong)



锥腹蜻 雄, 云南(德宏)
Acisoma panorpoides, male from Yunnan (Dehong)

异蜻属 Genus *Aethriamanta* Kirby, 1889

褐基异蜻 雄翅

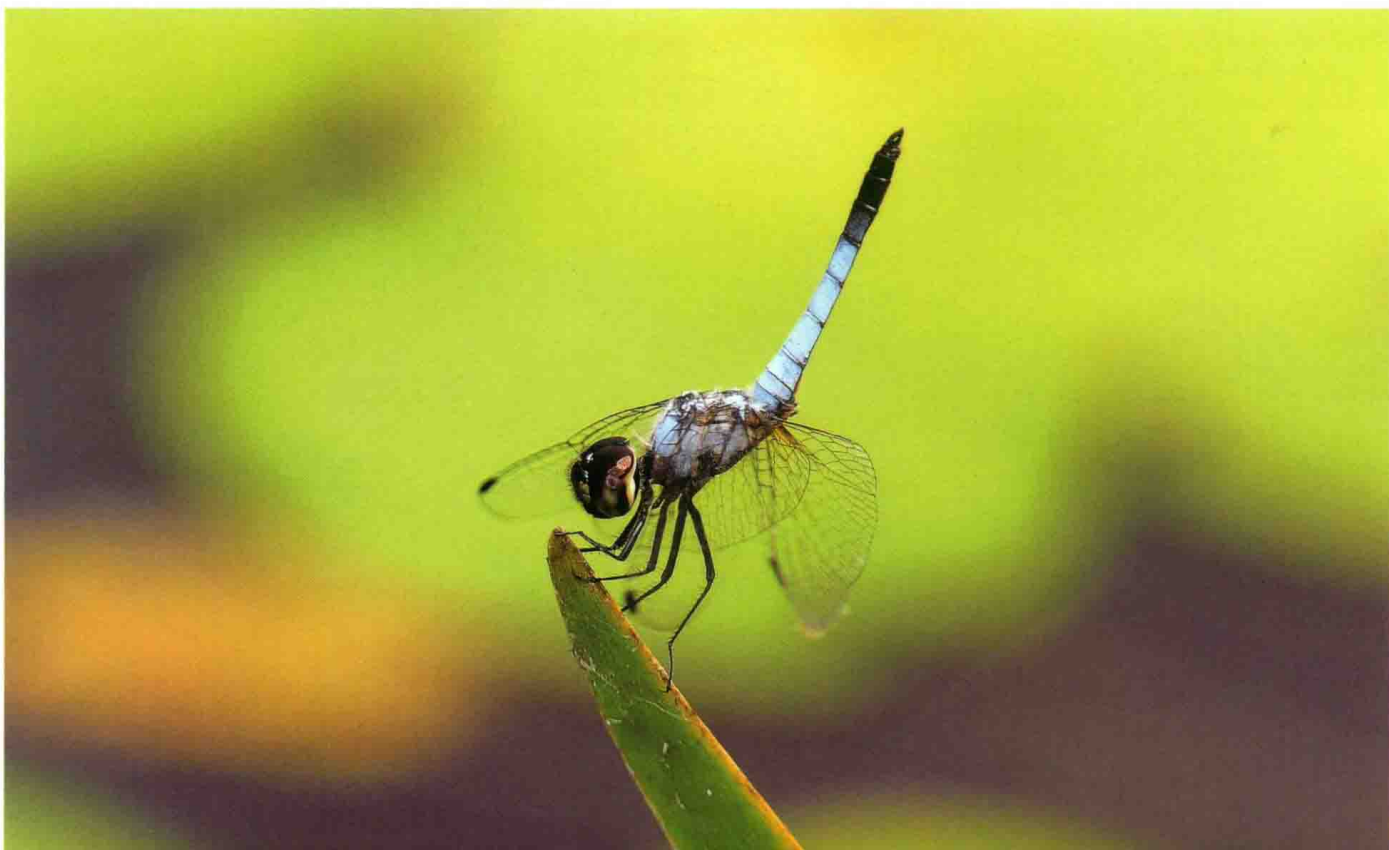
Aethriamanta aethra, male wings

本属全球已知6种，主要分布在亚洲和非洲的热带地区。中国已知3种，仅发现于云南的低海拔湿地。本属均为体型较小的蜻科物种。本属雄性体色较艳丽，有些红色，有些覆盖蓝白色粉霜；雌性体色黄褐色，通常为黄褐色。翅大面积透明，基方具深色斑，翅脉稀疏，具较少的结前横脉，弓脉位于第1条与第2条结前横脉之间，盘区基方具1~2列翅室，基臀区具1条横脉，臀圈靴状。

本属蜻蜓喜欢水草茂盛的静水环境，尤其偏爱水葫芦滋生的池塘。雄性会停立在水葫芦的叶片顶端占据领地，并时而飞行，时而定点悬停。

The genus contains six species, mainly distributed in tropical Asia and Africa. Three species are recorded from China, only found in lowland wetlands of Yunnan. Species of the genus are small-sized. Males are colorful, red or pruinosed with bluish white whereas. Females are yellowish brown. Wings largely hyaline but hind wing bases with dark spots, venation sparse, antenodals in small number, arc between antenodals 1 and 2, discoidal field with 1-2 rows of cells basally, cubital space with one crossvein, anal loop boot-shaped.

Aethriamanta species inhabit well vegetated wetlands and are common inhabitants of ponds containing water hyacinth. Males usually perch on tips of emergent leaves of hyacinth, and sometimes leave their perch and hover.



霜蓝异蜻 雄

Aethriamanta gracilis, male

褐基异蜻 *Aethriamanta aethra* Ris, 1912

褐基异蜻 雄, 云南(德宏)
Aethriamanta aethra, male from Yunnan (Dehong)



褐基异蜻 雌, 云南(德宏)
Aethriamanta aethra, female from Yunnan (Dehong)



褐基异蜻 雄, 云南(德宏)
Aethriamanta aethra, male from Yunnan (Dehong)

【形态特征】雄性全身覆盖蓝色粉霜；复眼黑褐色，面部蓝黑色，额具金属光泽；后翅基方具甚大的黑褐色斑；腹部第1~6节覆盖蓝色粉霜，第7~10节黑色。雌性主要褐色；合胸黑色具黄褐色条纹；腹部黑色具黄褐色斑。【长度】体长 26~31 mm，腹长 16~19 mm，后翅 22~24 mm。【栖息环境】海拔 500 m 以下水葫芦滋生的池塘。【分布】云南(德宏)；柬埔寨、印度尼西亚、马来半岛、新加坡、泰国、越南。【飞行期】3—12月。

【Identification】Male with blue pruinosity throughout. Eyes blackish brown, face metallic bluish black. Hind wing bases with large blackish brown markings. Abdomen with blue pruinosity on S1-S6, S7-S10 black. Female mainly brown. Thorax black with yellowish brown markings. Abdomen black with yellowish brown spots. 【Measurements】Total length 26-31 mm, abdomen 16-19 mm, hind wing 22-24 mm. 【Habitat】Ponds with water hyacinth below 500 m elevation. 【Distribution】Yunnan (Dehong); Cambodia, Indonesia, Peninsular Malaysia, Singapore, Thailand, Vietnam. 【Flight Season】March to December.

红腹异蜻 *Aethriamanta brevipennis* (Rambur, 1842)

【形态特征】雄性复眼黑褐色，面部蓝黑色，额具金属光泽；胸部背面黑色，侧面黄褐色，足黑色，后足腿节末端具1个甚小的红色斑，后翅基方具红褐色斑；腹部鲜红色，短而粗壮。雌性主要黄褐色；后足腿节末端具1个甚小的黄色斑；腹部黄色具黑色条纹。【长度】体长 27~29 mm，腹长 16~19 mm，后翅 24~25 mm。【栖息环境】海拔 500 m 以下水葫芦滋生的池塘。【分布】云南（德宏）、广东、香港；孟加拉国、印度、尼泊尔、斯里兰卡、马来半岛、印度尼西亚、新加坡、缅甸、泰国、柬埔寨。【飞行期】3—12月。

【Identification】 Male eyes blackish brown, face metallic bluish black. Thorax black dorsally and yellowish brown laterally, legs black with a small red spot on tip of hind femora, hind wing bases with reddish brown markings. Abdomen red and depressed. Female largely yellowish brown. Legs black with a small yellow spot on tip of hind femora. Abdomen yellow with black stripes. 【Measurements】 Total length 27-29 mm, abdomen 16-19 mm, hind wing 24-25 mm.



红腹异蜻 雄, 云南(德宏)

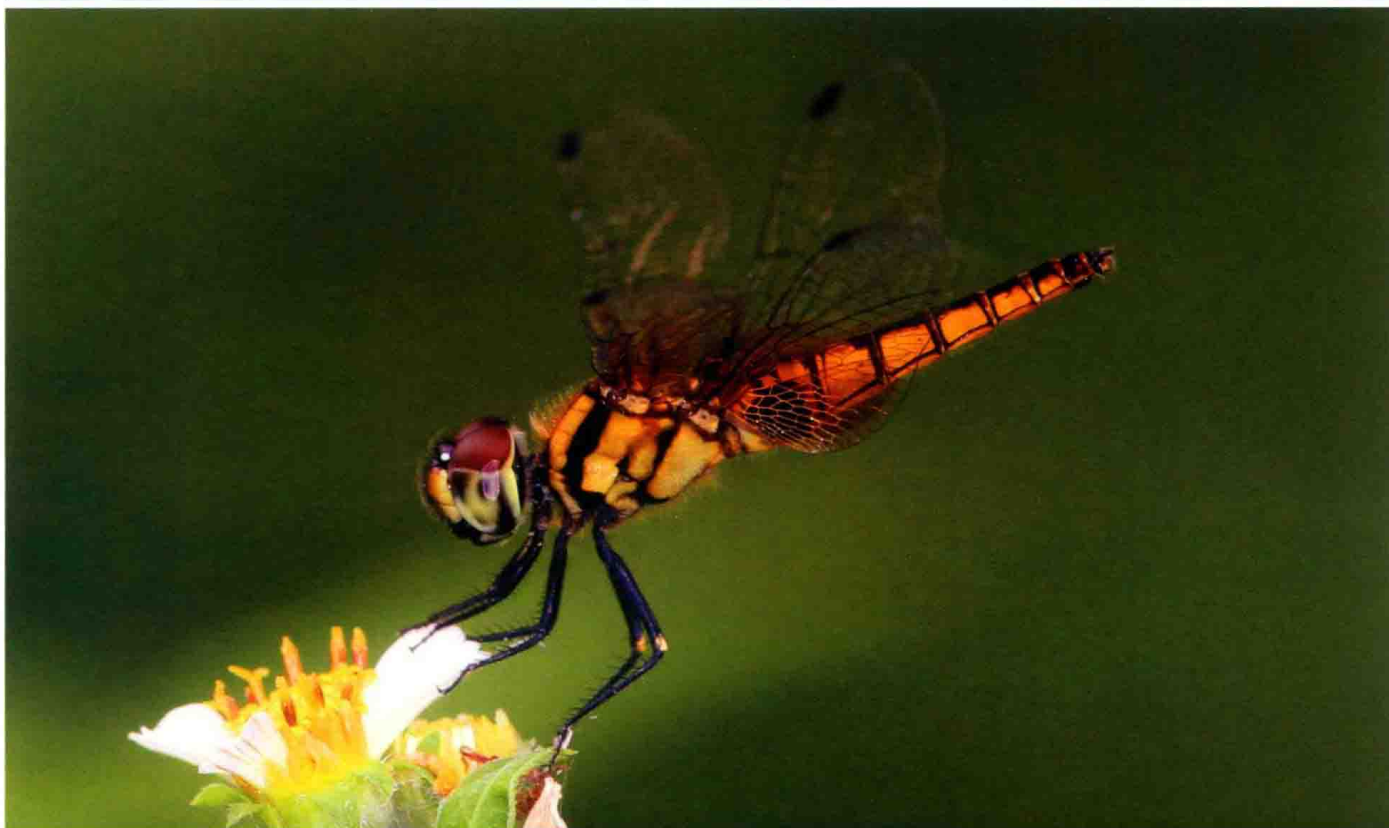
Aethriamanta brevipennis, male from Yunnan (Dehong)

[**Habitat**] Ponds with water hyacinth below 500 m elevation. [**Distribution**] Yunnan (Dehong), Guangdong, Hong Kong; Bangladesh, India, Nepal, Sri Lanka, Peninsular Malaysia, Indonesia, Singapore, Myanmar, Thailand, Cambodia. [**Flight Season**] March to December.



红腹异蜻 雄, 云南(德宏)

Aethriamanta brevipennis, male from Yunnan (Dehong)



红腹异蜻 雌, 香港 | 梁嘉景 摄

Aethriamanta brevipennis, female from Hong Kong | Photo by Kenneth Leung

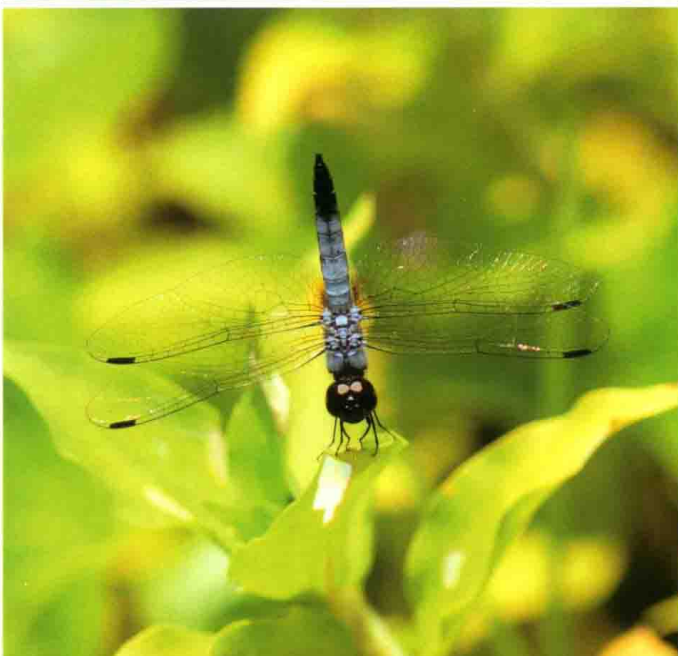
霜蓝异蜻 *Aethriamanta gracilis* (Brauer, 1878)

【形态特征】雄性复眼褐色，面部黄褐色，额黑色具金属光泽；胸部覆盖蓝白色粉霜，翅透明，后翅基方染琥珀色；腹部第1~6节覆盖蓝白色粉霜，第7~10节深蓝色至黑色。雌性胸部蓝黑色具黄褐色条纹；腹部蓝黑色。【长度】体长 26~28 mm，腹长 16~18 mm，后翅 23~24 mm。【栖息环境】海拔 500 m 以下挺水植物茂盛的池塘。【分布】云南（西双版纳、德宏）；柬埔寨、印度尼西亚、马来西亚、新加坡、泰国、老挝、菲律宾。【飞行期】4—10月。

【Identification】 Male eyes brown, face yellowish brown, frons metallic black. Thorax with bluish white pruinosity, wings hyaline, hind wing bases with amber tint. Abdomen with bluish white pruinosity on S1-S6, S7-S10 dark blue to black. Female thorax bluish black with yellowish brown markings. Abdomen bluish black. 【Measurements】 Total length 26-28 mm, abdomen 16-18 mm, hind wing 23-24 mm. 【Habitat】 Wetlands with copious amounts of emergent vegetation below 500 m elevation. 【Distribution】 Yunnan (Xishuangbanna, Dehong); Cambodia, Indonesia, Malaysia, Singapore, Thailand, Laos, Philippines. 【Flight Season】 April to October.



霜蓝异蜻 雌, 云南 (西双版纳)
Aethriamanta gracilis, female from Yunnan (Xishuangbanna)



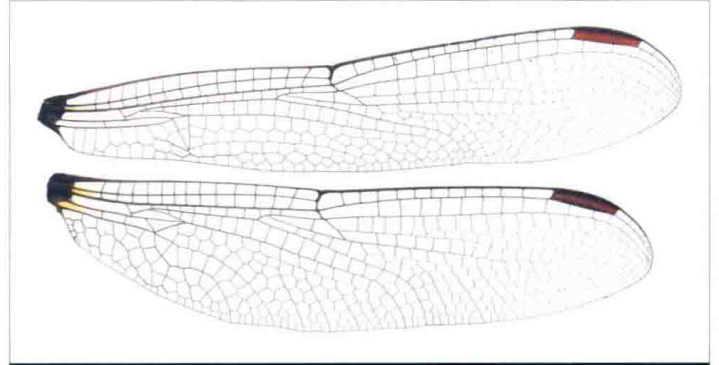
霜蓝异蜻 雄, 云南 (西双版纳)
Aethriamanta gracilis, male from Yunnan (Xishuangbanna)



豹纹蜻属 Genus *Agrionoptera* Brauer, 1864

本属全球已知6种，主要分布于亚洲的热带地区和大洋洲。中国已知2亚种，分布于云南和台湾。本属蜻蜓体型小至中型；翅透明而狭长，后翅基方未显著加阔，翅痣很长，具有较多条结前横脉，弓脉位于第2条与第3条结前横脉之间，前翅三角室的上缘很短，基臀区具1条横脉，盘区基方具2~3列翅室，臀圈袋状。

本属蜻蜓栖息于茂盛森林中的池塘，在有林荫遮盖的池塘周边可以发现。雄性会停落在池塘边的植物上。本属中国分布的豹纹蜻与亚洲秘蜻相似，但可以通过胸部的斑纹区分。

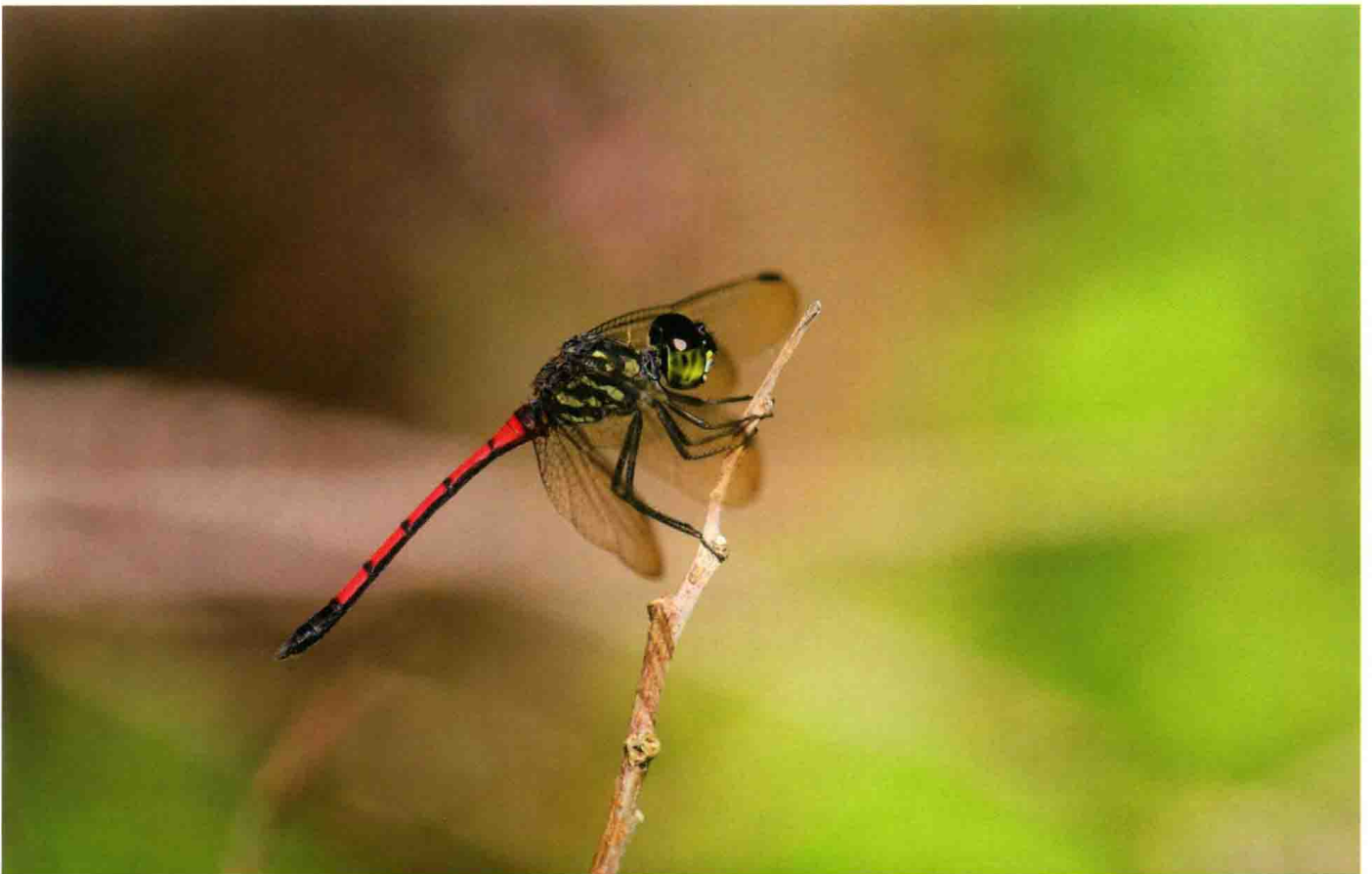


豹纹蜻台湾亚种 雄翅

Agrionoptera insignis similis, male wings

The genus contains six species distributed throughout tropical Asia and Oceania. Two subspecies are known from Yunnan and Taiwan, China. Species of the genus are small to medium sized dragonflies. Wings hyaline and narrow, but hind wing bases not broad, pterostigma long, antenodals abundant, arc between antenodals 2 and 3, the anterior margin of triangle short in fore wings, cubital space with one crossvein, discoidal field with 2-3 rows of cells, anal loop sack-shaped.

Agrionoptera species inhabit ponds in dense forests. Territorial male perch on plants near water. *Agrionoptera insignis*, the only species in China, is similar to *Lathrecista asiatica*, but their thoracic color pattern is different.



豹纹蜻指名亚种 雄

Agrionoptera insignis insignis, male

豹纹蜻指名亚种 *Agrionoptera insignis insignis* (Rambur, 1842)

豹纹蜻指名亚种 雌, 马来西亚
Agrionoptera insignis insignis, female from Malaysia



豹纹蜻指名亚种 雄, 云南(西双版纳)
Agrionoptera insignis insignis, male from Yunnan (Xishuangbanna)



豹纹蜻指名亚种 雄, 云南(西双版纳)
Agrionoptera insignis insignis, male from Yunnan (Xishuangbanna)

【形态特征】雄性复眼褐色和绿色，面部白色，额具1个金属蓝黑色斑；胸部黑色具不规则的黄色条纹和斑点，足黑色，翅透明；腹部大面积红色，第3~7节末端具黑色环纹，第8~10节和肛附器黑色。【长度】雄性体长 37 mm，腹长 25 mm，后翅 28 mm。【栖息环境】海拔 1000 m 以下森林中的池塘。【分布】云南(德宏、西双版纳)；从东南亚至大洋洲广布。【飞行期】9—12月。

【Identification】Male eyes brown and green, face white, frons with a metallic bluish black spot. Thorax black with irregular yellow markings, legs black, wings hyaline. Abdomen largely red, S3-S7 with distal black rings, S8-S10 and anal appendages black. 【Measurements】Male total length 37 mm, abdomen 25 mm, hind wing 28 mm. 【Habitat】Ponds in forest below 1000 m elevation. 【Distribution】Yunnan (Dehong, Xishuangbanna); Widespread from Southeast Asia to Oceania. 【Flight Season】September to December.

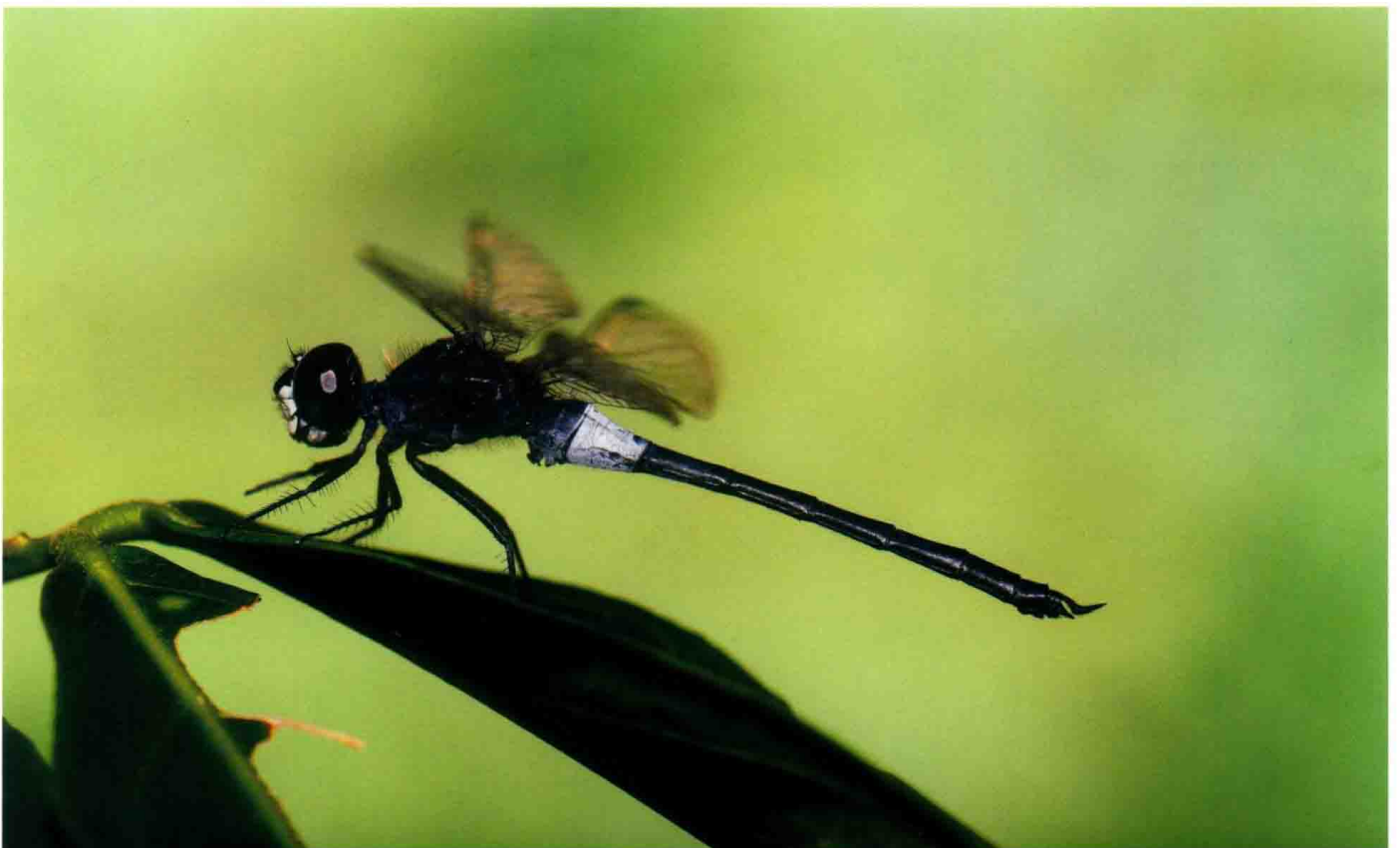
豹纹蜻台湾亚种 *Agrionoptera insignis similis* Selys, 1879

【形态特征】雄性复眼褐色和绿色，面部白色，额具1个金属蓝黑色斑；胸部黑色具不规则的黄色条纹和斑点，足黑色，翅透明；腹部大面积红色，第1~7节红色，第8~10节和肛附器黑色。本亚种与指名亚种合胸的黄色条纹形状有差异，而且腹部第3~7节末端无黑色环纹。【长度】雄性体长 42 mm，腹长 23 mm，后翅 31 mm。【栖息环境】海拔 500 m 以下森林中的池塘。【分布】中国台湾；菲律宾至所罗门的热带岛屿。【飞行期】5—10月。

[Identification] Male eyes brown and green, face white, frons with a metallic bluish black spot. Thorax black with irregular yellow markings, legs black, wings hyaline. Abdomen largely red, S1-S7 red, S8-S10 and anal appendages black. The subspecies differs from the nominate subspecies by the shape of thoracic yellow markings and S3-S7 without black rings. **[Measurements]** Male total length 42 mm, abdomen 23 mm, hind wing 31 mm. **[Habitat]** Ponds in forest below 500 m elevation. **[Distribution]** Taiwan of China; Tropical islands from Philippines to Solomon islands. **[Flight Season]** May to October.

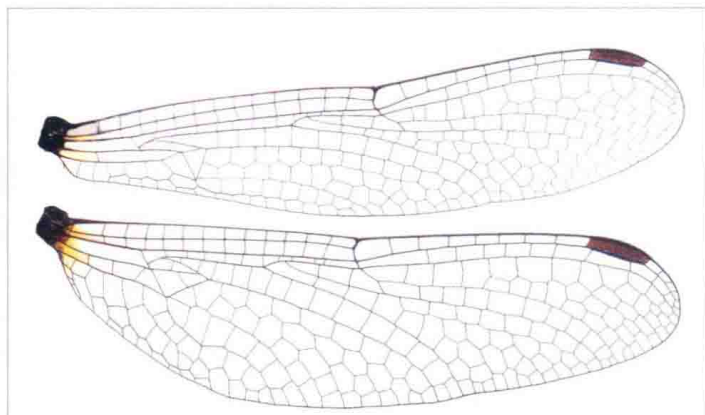


豹纹蜻台湾亚种 雄, 台湾

Agrionoptera insignis similis, male from Taiwan**安蜻属 Genus *Amphithemis* Selys, 1891**

长腹安蜻, 雄

Amphithemis vacillans, male



红安蜻 雄翅

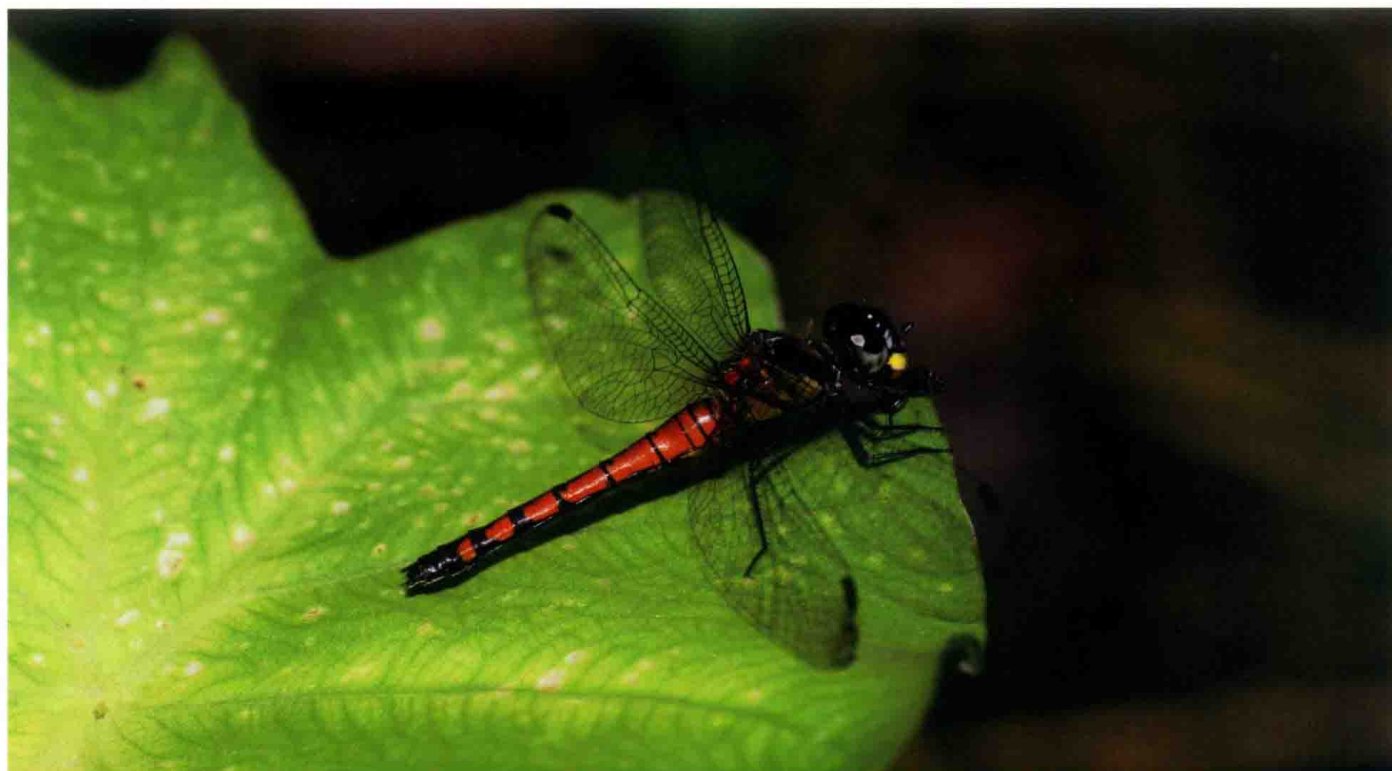
Amphithemis curvistyla, male wings

of the genus are small-sized dragonflies. Wings hyaline and narrow, hind wing bases not clearly broad, pterostigma long, antenodals abundant, arc between antenodals 2 and 3, the anterior margin of triangle short in fore wings, cubital space with one crossvein, discoidal field with two rows of cells, anal loop sack-shaped.

Amphithemis species inhabit well vegetated ponds in forests. Territorial males perch on plants near water.

红安蜻 *Amphithemis curvistyla* Selys, 1891

【形态特征】雄性复眼黑褐色，面部白色，额具1个金属蓝黑色斑；胸部黄褐色，肩条纹甚阔，黑色，翅透明；腹部第1~8节红色，第3~8节末端具黑色斑，第9~10节和肛附器黑色。雌性多型，黄色型的雌性腹部黄色，具宽阔的黑色条纹；红色型雌性和雄性的色彩相似。【长度】雄性体长 31~32 mm，腹长 21~22 mm，后翅 24~25 mm。【栖息环境】海拔 1500 m 以下挺水植物茂盛的湿地。【分布】云南（西双版纳）；缅甸、泰国、越南。【飞行期】9—12月。



红安蜻 雌，红色型，云南（西双版纳）

Amphithemis curvistyla, female, the red morph from Yunnan (Xishuangbanna)

[Identification] Male eyes blackish brown, face white, frons with a metallic bluish black spot. Thorax yellowish brown, antehumeral stripes broad and black, wings hyaline. S1-S8 red, S3-S8 with distal black spots, S9-S10 and anal appendages black. Female polymorphic, the yellow morph with yellow abdomen and broad black stripes. The red morph similar to male. **[Measurements]** Male total length 31-32 mm, abdomen 21-22 mm, hind wing 24-25 mm. **[Habitat]** Wetlands with plenty emerging plants below 1500 m elevation. **[Distribution]** Yunnan (Xishuangbanna); Myanmar, Thailand, Vietnam. **[Flight Season]** September to December.



红安蜻 雄, 云南(西双版纳) | 莫善濂 摄

Amphithemis curvistyla, male from Yunnan (Xishuangbanna) | Photo by Shanlian Mo



红安蜻 雄, 云南(西双版纳) | 莫善濂 摄

Amphithemis curvistyla, male from Yunnan (Xishuangbanna) | Photo by Shanlian Mo



红安蜻 雌, 黄色型, 云南(西双版纳) | 莫善濂 摄

Amphithemis curvistyla, female, the yellow morph from Yunnan (Xishuangbanna) | Photo by Shanlian Mo