

## **Checklist**

### **Butterfly collections from Ulu Senagang Substation area, Crocker Range Park, Tenom, Sabah, Malaysia (Lepidoptera: Rhopalocera)**

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**ABSTRACT.** A list of butterflies collected at the Ulu Senagang substation area in the Crocker Range Park is presented here, composed of 147 species from five families. Since this is a result from a survey lasting a total of 38 hours, extended surveys may show 200 species occurring there. The potential to make use of this diverse butterfly fauna as a target for eco-tourism is discussed.

**Keywords:** Butterfly, Lepidoptera, Crocker Range Park, Sabah.

## **INTRODUCTION**

Substation Ulu Senagang was established in 2006 as the sixth substation in the Crocker Range Park: Mount Alab, Inobong, Mahua, Malangan, Ulu Kimanis and Ulu Senagang. This substation area is at the lower hills along the Mosolog River at an elevation of 400 - 800 m above sea level and situated near the western end of the Crocker Range. Hills are mainly covered by dipterocarpus forests, and the narrow valley is inhabited by people. There are about 40 houses surrounded by orchards, crop fields and small gum forests. This situation is an exception given the fact that no one is

permitted to live in a national park. The area is recognised as a Community Use Zone (CUZ). This is also a model of people using forest resources in a sustainable manner to ensure the park remains intact. Eco-tourism is considered as a means for this type of CUZ management.

Butterflies are generally large and are attractive to most people and for this reason is a target for eco-tourism. There is no published record of local butterfly fauna in the Crocker Range Park. Even the Crocker Range Scientific Expedition in 2002 gave no information on local butterfly fauna (Maryati *et al.*, 2004). We report here a list of butterflies collected in July and August 2010 and January 2011.

## **METHODS**

Surveys of butterflies at the Ulu Senagang Substation area were carried out on 24–26 July 2010, 11–12 August 2010, and 31 January to 1 February 2011, with an aim to gather basic data on butterfly fauna.

Using aerial nets, we collected butterflies along the main road from Mosolog River to the substation office, and along a short trail to the

waterfall. Although the surveyed area covers a forest along the waterfall trail and open fields along the main road with houses, orchards and crop fields, we did not discriminate both sub-areas in the result. A series of representative specimens were prepared and identified following Ohtuka (1988), Maruyama & Ohtuka (1991) and Seki *et al.* (1991). The prepared specimens are housed tentatively in the Crocker Range Park headquarters in Keningau and will be transferred to the Ulu Senagang Information Centre once it is built.

## RESULTS AND DISCUSSION

Surveys with 38 net hours spent on collecting butterflies resulted in us identifying 147 species belonging to five families (Appendix 1): Papilionidae (17 spp.), Pieridae (18 spp.), Nymphalidae (62 spp.), Lycaenidae (33 spp.) and Hesperiidae (17 spp.).

Most of the collected species are common and widely distributed in the lowlands of Sabah. Our knowledge on local fauna or distribution of butterflies in Sabah is still poor (Kinabalu Park: 290 spp. Holloway, 1996; Banggi Island: 36 spp., Zaidi, 1997; Maliau Basin: 37 spp., Maryati *et al.*, 1998; Tabin Wildlife Reserve: 310 spp., Jalil *et al.*, 1999; Kinabatangan Wildlife Sanctuary: 164 spp., Jalil *et al.* 2002; Sungai Imbak Forest Reserve: 147 spp., Jalil *et al.*, 2008). Based on existing surveys in other areas, a list of 147 species from the lowland of Tenom has some importance. With repeated surveys, a total of 200 species could be expected from this area. Similar surveys at each substation at the Crocker Range Park will be also useful for an analysis of local butterfly fauna in Sabah.

Though worldwide there are a lot of butterfly tours, there is no established butterfly tour in Sabah and there are few attempts to use butterflies for environmental education. In the open grassland around the substation office, a lot of butterflies gather and absorb water and these include large swallowtails (*Graphium* spp., *Lamproptera* spp., *Papilio* spp. and *Trigonoptera brookiana*), light-coloured

pierids (*Eurema* spp., *Appias* spp., *Hebomoia glaucippe* and *Priocnemis cornelia*), swift nymphalids (*Athyma assa*, *Cyrestis nivea*, *Hypolimnas bolina* and *Polyura moori*), and hundreds of small lycaenids (*Caleta* sp., *Curestis* sp. and *Prosotas* spp.). These butterflies fly low and gather around wet soil. This scenery is not experienced by most tourists who visit the substation. Along the main road leading to the village, a lot of open-field butterfly species can be seen. It is possible to conduct a small-scale butterfly tour at Ulu Senagang, or to leverage on butterflies as material for environmental education. We are convinced that such small tours are beneficial and are attractive to tourists within the scope of ecotourism.

In the process of maintaining and improving the village environment, it is necessary to pay attention to the existence of butterflies. Increasing flowering plants along the main road and in yards will attract butterflies and will additionally add to the scenery, a plus point for tourists. In selecting flowers to attract butterflies, hibiscus and low lantana could be a couple of options. Conservation of and planting of food plants such as *Aristolochia* spp. of Aristolochiaceae, *Cinnamomum* spp. of Lauraceae and *Citrus* spp. of Rutaceae which in particular are consumed by large swallowtails, are other options. It is suggested that new trails are built inside crop fields and orchards for the observation of butterflies, and to maintain wet bare points for butterflies to absorb moisture. Above all, providing adequate pamphlets and training guides are vital in drawing tourists. Such activities will serve as important tasks at the information centre which is currently under construction.

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### Appendix 1. Butterflies collected at Ulu Senagang area.

#### **Papilionidae**(17 spp.)

*Chilasa slateri hewitsoni* Westwood: 1 ex., 24-26.VII.2010, H. Takizawa leg.; 1 ex., 31.I.2011, N. Yamada leg.

*Graphium agamemnon agamemnon* Fruhstorfer: 1 ex., 24-26.VII.2010, H. Takizawa leg.; sight record (11-12.VIII.2010, H. Takizawa).

*Graphium bathycles bathycloides* Honrath: 2 exs., 11-12.VIII.2010, H. Takizawa leg.

*Graphium doson evemonoides* Horath: 1 ex., 11-12.VIII.2010, H. Takizawa leg.

*Graphium empedovana empedovana* Corbert: sight record (24-26.VII.2010, H. Takizawa).

*Graphium eurypylus mecisteus* Distant: 1 ex., 1.II.2011, N. Yamada leg.

*Graphium evemon orthis* Jordan: 1 ex., 24-26.VII.2010, H. Takizawa leg.; 3 exs., 11-12.VIII.2010, H. Takizawa leg.; 3 exs., 1.II.2011, N. Yamada leg.

*Graphium sarpedon sarpedon* Linnaeus: 1 ex., 24-26.VII.2010, H. Takizawa leg.; 1 ex., 11-12.VIII.2010, H. Takizawa leg.

*Lamproptera meges meges* Zinken: 1 ex., 24-26.VII.2010, H. Takizawa leg.; sight record (11-12.VIII.2010, H. Takizawa); 1 ex., 1.II.2011, N. Yamada leg.

*Lamproptera curius curius* Fabricius: 1 ex., 24-26.VII.2010, H. Takizawa leg.; 3 exs., 1.II.2011, N. Yamada leg.

*Papilio demolion demolion* Cramer: 1 ex., 11-12.VIII.2010, H. Takizawa leg.; sight record (31.I.2011, H. Takizawa)

*Papilio helenus enganius* Doherty: 1 ex., 11-12.VIII.2010, H. Takizawa leg.

*Papilio memnon memnon* Linnaeus: sight record (24-26.VII.2010, 11-12.VIII.2010, H. Takizawa); 1 ex., 1.II.2011, N. Yamada leg.

*Papilio nephelus albolineatus* Forbes: sight record (11-12.VIII.2010, H. Takizawa)

*Papilio palinurus palinurus* Rothschild; sight record (11-12.VIII.2010, H. Takizawa)

*Papilio polytes theseus* Cramer: sight record (24-26.VII.2010, H. Takizawa; 11-12.VIII.2010, H. Takizawa; 31.I.2011, H. Takizawa)

*Trogonoptera brookiana brookiana* Wallace: 1 ex., 24-26.VII.2010, H. Takizawa leg.; 2 exs.,

11-12.VIII.2010, H. Takizawa leg.; 1 ex., 1.II.2011, N. Yamada leg.

#### **Pieridae**(18 spp.)

*Appias lyncida enarete* Boisduval: 2 exs., 24-26.VII.2010, H. Takizawa leg.; 1 ex., 11-12.VIII.2010, H. Takizawa leg.; 3 exs., 1.II.2011, N. Yamada leg.

*Appias nero chelidon* Fruhstorfer: 1 ex., 24-26.VII.2010, H. Takizawa leg.

*Captosilia pyranthe pyranthe* Linnaeus: 2 exs., 11-12.VIII.2010, H. Takizawa leg.; 1 ex., 1.II.2011, N. Yamada leg.

*Captosilia pomona pomona* Fabricius: 1 ex., 24-26.VII.2010, H. Takizawa leg.; 1 ex., 11-12.VIII.2010, H. Takizawa leg.

*Catopsilia scylla cornelia* Fabricius: sight record (24-26.VII.2010, H. Takizawa)

*Cepora iudith hespera* Butler: 1 ex., 31.I.2011, N. Yamada leg.

*Cepora pactolicus* Butler: 1 ex., 24-26.VII.2010, H. Takizawa leg.; 1 ex., 1.II.2011, N. Yamada leg.

*Eurema andersoni borneensis* Shirozu & Yata: 1 ex., 24-26.VII.2010, H. Takizawa leg.; 3 exs., 11-12.VIII.2010, H. Takizawa leg.; 1 ex., 31.I.2011, N. Yamada leg.

*Eurema blanda blanda* Yata: 1 ex., 1.II.2011, N. Yamada leg.

*Eurema hecate hecate* Linnaeus: 1 ex., 24-26.VII.2010, H. Takizawa leg.; 1 ex., 11-12.VIII.2010, H. Takizawa leg.; 1 ex., 1.II.2011, N. Yamada leg.

*Eurema nicevillei nicevillei* Butler: 1 ex., 24-26.VII.2010, H. Takizawa leg.

*Eurema simulatrix tecmesa* De Niceville: 1 ex., 24-26.VII.2010, H. Takizawa leg.; 1 ex., 11-12.VIII.2010, H. Takizawa leg.

*Gandaca harina elis* Fruhstorfer: 1 ex., 11-12.VIII.2010, H. Takizawa leg.; 1 ex., 1.II.2011, N. Yamada leg.

*Hebomoia glaucippe borneensis* Wallace: 1 ex., 24-26.VII.2010, H. Takizawa leg.; 1 ex., 11-12.VIII.2010, H. Takizawa leg.; 1 ex., 1.II.2011, N. Yamada leg.

*Ixias undatus* Butler: 1 ex., 24-26.VII.2010, H. Takizawa leg.; 1 ex., 11-12.VIII.2010, H. Takizawa leg.; sight record (1.II.2011, H.

## Takizawa)

*Leptosia nina malayana* Fruhstorfer: 1 ex., 24-26.VII.2010, H. Takizawa leg.; 1 ex., 11-12.VIII.2010, H. Takizawa leg.; 2 exs., 1.II.2011, N. Yamada leg.

*Pareronia valeria lutescens* Butler: sight record (24-26.VII.2010, H. Takizawa; 1.II.2011, H. Takizawa); 1 ex., 11-12.VIII.2010, H. Takizawa leg.

*Priocneris cornelia* Voolenhoven: 1 ex., 24-26.VII.2010, H. Takizawa leg.; 2 exs., 11-12.VIII.2010, H. Takizawa leg.

## Nymphalidae (62 spp.)

## Danainae (10 spp.)

*Parantica aspasia aspasia* Fabricius: 1 ex., 24-26.VII.2010, H. Takizawa leg.; 1 ex., 11-12.VIII.2010, H. Takizawa leg.

*Anosia genuititia intensa* Moore: 1 ex., 24-26.VII.2010, H. Takizawa leg.; sight record (11-12.VIII.2010, H. Takizawa)

*Anosia melanippus theo* Hubner: 1 ex., 11-12.VIII.2010, H. Takizawa leg.

*Tirumala septentrionis septentrionis* Hubner: 1 ex., 24-26.VII.2010, H. Takizawa leg.; 1 ex., 11-12.VIII.2010, H. Takizawa leg.

*Euploea crameri crameri* Lucas: 1 ex., 24-26.VII.2010, H. Takizawa leg.; 1 ex., 11-12.VIII.2010, H. Takizawa leg.

*Euploea mulciber protia* Fruhstorfer: 1 ex., 11-12.VIII.2010, H. Takizawa leg.; 1 ex., 1.II.2011, N. Yamada leg.

*Euploea phaenareta butleri* Moore: 1 ex., 1.II.2011, N. Yamada leg.

*Euploea tulliolus aristotelis* Moore: 2 exs., 24-26.VII.2010, H. Takizawa leg.; 2 exs., 11-12.VIII.2010, H. Takizawa leg.; 4 exs., 31.I-1.II.2011, N. Yamada leg.

*Ideolopsis gaura daos* Poisduval: sight record (24-26.VII.2010, H. Takizawa; 1.II.2011, H. Takizawa)

*Ideopsis vulgaris interposita* Fruhstorfer: 1 ex., 11-12.VIII.2010, H. Takizawa leg.; 1 ex., 1.II.2011, N. Yamada leg.

## Satyrinae (20 spp.)

*Discophora necho cheops* C. & R. Feder: 1 ex., 1.II.2011, N. Yamada leg.

*Erites elegans elegans* Butler: 1 ex., 11-12.VIII.2010, H. Takizawa leg.; 1 ex.,

1.II.2011, N. Yamada leg.

*Faunis gracilis gracilis* Butler: 1 ex., 11-12.VIII.2010, H. Takizawa leg.; 1 ex., 1.II.2011, N. Yamada leg.

*Faunis stomphax stomphax* Westwood: 1 ex., 31.I.2011, N. Yamada leg.

*Melantis leda leda* Linnaeus: 1 ex., 1.II.2011, N. Yamada leg.

*Mycalesis anapita fuscentia* Fruhstorfer: 1 ex., 24-26.VII.2010, H. Takizawa leg.; 2 exs., 11-12.VIII.2010, H. Takizawa leg.; 6 exs., 31.I-1.II.2011, N. Yamada leg.

*Mycalesis fusca adustata* Fruhstorfer: 1 ex., 1.II.2011, N. Yamada leg.

*Mycalesis horsfieldi hermana* Fruhstorfer: 1 ex., 24-26.VII.2010, H. Takizawa leg.; 2 exs., 31.I-1.II.2011, N. Yamada leg.

*Mycalesis janardana baluna* Fruhstorfer: 1 ex., 11-12.VIII.2010, H. Takizawa leg.

*Mycalesis mineus macromalayana* Fruhstorfer: 1 ex., 24-26.VII.2010, H. Takizawa leg.; 2 exs., 11-12.VIII.2010, H. Takizawa leg.; 2 exs., 1.II.2011, N. Yamada leg.

*Mycalesis orseis borneensis* Fruhstorfer: 1 ex., 31.I.2011, N. Yamada leg.

*Neorina lowii lowii* Doubleday: sight record (24-26.VII.2010, 11-12.VIII.2010, H. Takizawa); 2 exs., 1.II.2011, N. Yamada leg.

*Ragadia makuta umbrata* Fruhstorfer: 1 ex., 11-12.VIII.2010, H. Takizawa leg.

*Taenaris horsfieldii occulta* Grosse-Smith: sight record (11-12.VIII.2010, H. Takizawa)

*Thaumantis klugius lucipor* Westwood: 1 ex., 11-12.VIII.2010, H. Takizawa leg.; 1 ex., 31.I.2011, N. Yamada leg.

*Thauria aliris aliris* Westwood: 1 ex., 11-12.VIII.2010, H. Takizawa leg.

*Xanthotaenia busiris burra* Stichel: 1 ex., 11-12.VIII.2010, H. Takizawa leg.; sight record (1.II.2011, H. Takizawa)

*Ypthima baldus selinuntius* Fruhstorfer: 1 ex., 24-26.VII.2010, H. Takizawa leg.; 1 ex., 11-12.VIII.2010, H. Takizawa leg.; 2 exs., 1.II.2011, N. Yamada leg.

*Ypthima fasciata fasciata* Hewitson: 1 ex., 31.I.2011, N. Yamada leg.

*Ypthima pandocus sertorius* Fruhstorfer: 1 ex., 11-12.VIII.2010, H. Takizawa leg.; 1 ex., 31.I.2011, N. Yamada leg.

**Nymphalinae (32 spp.)**

*Amnoscia decora buluana* Fruhstorfer: sight record (24-26.VII.2010, H. Takizawa)

*Athyma assa pseudocama* Tsukada & Kaneko: 1 ex., 24-26.VII.2010, H. Takizawa leg.; 1 ex., 11-12.VIII.2010, H. Takizawa leg.

*Bassarona dunya monara* Fruhstorfer: 1 ex., 1.II.2011, N. Yamada leg.

*Charaxes bernardus repititus* Butler: 1 ex., 24-26.VII.2010, H. Takizawa leg.; 3 exs., 11-12.VIII.2010, H. Takizawa leg.; 2 exs., 1.II.2011, N. Yamada leg.

*Chersonesia rahria rahria* Moore: 1 ex., 11-12.VIII.2010, H. Takizawa leg.

*Cupha erymanthis erymanthis* Drury: 1 ex., 24-26.VII.2010, H. Takizawa leg.; 2 exs., 11-12.VIII.2010, H. Takizawa leg.; 1 ex., 1.II.2011, N. Yamada leg.

*Cyrestis cocles sericeus* Butler: sight record (11-12.VIII.2010, H. Takizawa)

*Cyrestis nivea borneensis* Margin: 1 ex., 24-26.VII.2010, H. Takizawa leg.; 2 exs., 11-12.VIII.2010, H. Takizawa leg.

*Doleschallia bisaltide borneensis* Fruhstorfer: 1 ex., 24-26.VII.2010, H. Takizawa leg.

*Dophla evelina magama* Fruhstorfer: 1 ex., 24-26.VII.2010, H. Takizawa leg.; 2 exs., 1.II.2011, N. Yamada leg.

*Euripus nyctelius borneensis* Distant: 1 ex., 24-26.VII.2010, H. Takizawa leg.; 1 ex., 11-12.VIII.2010, H. Takizawa leg.

*Euthalia iapis ambalika* Moore: 1 ex., 11-12.VIII.2010, H. Takizawa leg.; 2 exs., 1.II.2011, N. Yamada leg.

*Hypolimnas anomala anomala* Wallace: 1 ex., 24-26.VII.2010, H. Takizawa leg.; 1 ex., 11-12.VIII.2010, H. Takizawa leg.

*Hypolimnas bolina philippinis* Butler: 1 ex., 24-26.VII.2010, H. Takizawa leg.; 3 exs., 11-12.VIII.2010, H. Takizawa leg.; 2 exs., 31.I-1.II.2011, N. Yamada leg.

*Junonia almana* Linnaeus: 1 ex., 24-26.VII.2010, H. Takizawa leg.

*Junonia atlites atlites* Linnaeus: 1 ex., 24-26.VII.2010, H. Takizawa leg.; 1 ex., 11-12.VIII.2010, H. Takizawa leg.; 2 exs., 1.II.2011, N. Yamada leg.

*Junonia hedonia ida* Cramer: 1 ex., 24-26.VII.2010, H. Takizawa leg.

*Junonia iphita viridis* Staudinger: 2 exs., 11-

12.VIII.2010, H. Takizawa leg.; 1 ex., 1.II.2011, N. Yamada leg.

*Junonia orithya metion* Fruhstorfer: sight record (24-26.VII.2010, 11-12.VIII.2010, H. Takizawa)

*Lebadea martha paduca* Moore: 1 ex., 11-12.VIII.2010, H. Takizawa leg.

*Moduza procris agnata* Fruhstorfer: sight record (24-26.VII.2010, H. Takizawa); 1 ex., 11-12.VIII.2010, H. Takizawa leg.; 1 ex., 1.II.2011, N. Yamada leg.

*Neptis clinia ila* Fruhstorfer: 1 ex., 1.II.2011, N. Yamada leg.

*Neptis hylas sopatra* Fruhstorfer: 1 ex., 24-26.VII.2010, H. Takizawa leg.; 1 ex., 11-12.VIII.2010, H. Takizawa leg.; 2 exs., 1.II.2011, N. Yamada leg.

*Parthenos sylvia borneensis* Staudinger: sight record (24-26.VII.2010, H. Takizawa); 1 ex., 11-12.VIII.2010, H. Takizawa leg.

*Polyura athamas uraeus* Rothschild & Jordan: 2 exs., 11-12.VIII.2010, H. Takizawa leg.; 1 ex., 1.II.2011, N. Yamada leg.

*Polyura moori saida* Preyer & Cator: 1 ex., 24-26.VII.2010, H. Takizawa leg.

*Symbrenthia* sp.: sight record (24-26.VII.2010, 11-12.VIII.2010, H. Takizawa)

*Tanaecia pelea djataca* Fruhstorfer: 1 ex., 1.II.2011, N. Yamada leg.

*Terinos atlita fulminas* Butler: 1 ex., 24-26.VII.2010, H. Takizawa leg.; 1 ex., 11-12.VIII.2010, H. Takizawa leg.

*Vagrans sinha creghana* W. B. Pryor & Cator: sight record (31.I.2011, H. Takizawa)

*Vindula erota montana* Fruhstorfer: sight record (24-26.VII.2010, H. Takizawa; 31.I.2011, H. Takizawa); 2 exs., 11-12.VIII.2010, H. Takizawa leg.

*Zemeros emesoides eso* Fruhstorfer: 2 exs., 11-12.VIII.2010, H. Takizawa leg.

**Lycaenidae (33 spp.)**

*Allotinus bidiensis* Eliot: 1 ex., 1.II.2011, N. Yamada leg.

*Allotinus horsfieldi permagnus* Fruhstorfer: 1 ex., 31.I.2011, N. Yamada leg.

*Arophala pseudocentaurus nakula* (C. & R. Felder): 1 ex., 11-12.VIII.2010, H. Takizawa leg.

*Arophala epimuta epimuta* (Moore): 1 ex., 11-

- 12.VIII.2010, H. Takizawa leg.  
*Arophala fulla intaca* Corbet; 1 ex., 11-12.VIII.2010, H. Takizawa leg.  
*Caleta manovus* (Fruhstorfer): 1 ex., 24-26.VII.2010, H. Takizawa leg.; 1 ex., 11-12.VIII.2010, H. Takizawa leg.; 3 exs., 31.I-1.II.2011, N. Yamada leg.  
*Catochrysops panormus exiguous* Distant: 5 exs., 1.II.2011, N. Yamada leg.  
*Celastrina lavendularis placidina* (Fruhstorfer) ?: 1 ex., 24-26.VII.2010, H. Takizawa leg.  
*Curetis santana malayca* (C. & R. Felder): 1 ex., 24-26.VII.2010, H. Takizawa leg.; 1 ex., 1.II.2011, N. Yamada leg.  
*Curetis sperthis sperthis* (C. & R. Felder): 1 ex., 11-12.VIII.2010, H. Takizawa leg.  
*Curetis tagalica jopa* Fruhstorfer: 1 ex., 1.II.2011, N. Yamada leg.  
*Drupadia ravindra moorei* (Distant); 1 ex., 11-12.VIII.2010, H. Takizawa leg.  
*Euchrysops cneus* (Fabricius): 1 ex., 11-12.VIII.2010, H. Takizawa leg.; 9 exs., 1.II.2011, N. Yamada leg.  
*Eooxylides tharis tharises* Fruhstorfer: 1 ex., 11-12.VIII.2010, H. Takizawa leg.  
*Hipolycea othona minima* H. Druce: 1 ex., 1.II.2011, N. Yamada leg.  
*Ionolyce helicon merguiana* Moore: 4 exs., 31.I-1.II.2011, N. Yamada leg.  
*Jamides aratus adana* H. Druce: 2 exs., 31.I.2011, N. Yamada leg.  
*Jamides caeruleus caeruleus* (H. Druce): 1 ex., 24-26.VII.2010, H. Takizawa leg.; 1 ex., 11-12.VIII.2010, H. Takizawa leg.  
*Jamides celeno lawasa* Moulton: 12 exs., 31.I-1.II.2011, N. Yamada leg.  
*Jamides pura tenus* (Fruhstorfer): 4 exs., 11-12.VIII.2010, H. Takizawa leg.  
*Lampides boeticus* (Linnaeus): 2 exs., 24-26.VII.2010, H. Takizawa leg.  
*Manto hypoleuca martini* Hewitson: 1 ex., 1.II.2011, N. Yamada leg.  
*Miletus cellarius* (Fruhstorfer): 1 ex., 24-26.VII.2010, H. Takizawa leg.  
*Miletus symethus petronius* (Distant & Pryer): 1 ex., 11-12.VIII.2010, H. Takizawa leg.  
*Nacaduba berenice akaba* H. Druce: 1 ex., 1.II.2011, N. Yamada leg.  
*Nacaduba hermus swatipa* Corbet: 1 ex., 1.II.2011, N. Yamada leg.  
*Nacaduba russelli* Tite: 1 ex., 31.I.2011, N. Yamada leg.  
*Nacaduba superlus lysa* Fruhstorfer: 1 ex., 24-26.VII.2010, H. Takizawa leg.; 3 exs., 11-12.VIII.2010, H. Takizawa leg.; 1 ex., 1.II.2011, N. Yamada leg.  
*Paralaxita damajanti lota* De Niceville: sight record (1.II.2011, H. Takizawa)  
*Prosotas nora superdates* (Fruhstorfer): 1 ex., 24-26.VII.2010, H. Takizawa leg.; 3 exs., 11-12.VIII.2010, H. Takizawa leg.; 1 ex., 1.II.2011, N. Yamada leg.  
*Prosotas aluta aluta* (H. Druce): 1 ex., 11-12.VIII.2010, H. Takizawa leg.  
*Spalgis epius* Westwood: 1 ex., 1.II.2011, N. Yamada leg.  
*Zizula hylax* Fabricius: 1 ex., 1.II.2011, N. Yamada leg.
- Hesperiidae (17 spp.)**
- Anacistrodes nigrita othonias* (Hewitson): 1 ex., 11-12.VIII.2010, H. Takizawa leg.; 1 ex., 1.II.2011, N. Yamada leg.  
*Baoris oceia* (Hewitson): 1 ex., 11-12.VIII.2010, H. Takizawa leg.  
*Bibasis sena uniformis* Elwes & Edwards: 1 ex., 11-12.VIII.2010, H. Takizawa leg.  
*Halpe ormenes vistula* Evans: 1 ex., 31.I.2011, N. Yamada leg.  
*Halpe pelethronix pelethronix* Fruhstorfer: 1 ex., 11-12.VIII.2010, H. Takizawa leg.  
*Iambrix stellifer* (Butler): 1 ex., 24-26.VII.2010, H. Takizawa leg.  
*Iton semamora barea* Hewitson: 1 ex., 31.I.2011, N. Yamada leg.  
*Koruthaialos rubecula rubecula* (Plotz): 2 exs., 11-12.VIII.2010, H. Takizawa leg.; 1 ex., 1.II.2011, N. Yamada leg.  
*Matapa druna* Moore: 1 ex., 1.II.2011, N. Yamada leg.  
*Notocrypta* sp.: sight record (11-12.VIII.2010, H. Takizawa)  
*Oriens gora pseudolus* (Mabille): 1 ex., 11-12.VIII.2010, H. Takizawa leg.  
*Pelopidas conjunctus conjunctus* Herrich-Schaeffer: 1 ex., 1.II.2011, N. Yamada leg.  
*Potanthus ganda maria* Evans: 1 ex., 24-26.VII.2010, H. Takizawa leg.; 1 ex., 11-12.VIII.2010, H. Takizawa leg.

*Pseudocoladenia dan fulvescens* (Elwes & Edwards): 1 ex., 24-26.VII.2010, H. Takizawa leg.; 1 ex., 1.II.2011, N. Yamada leg.

*Psolos fuligo fuligo* (Mabille): 1 ex., 24-26.VII.2010, H. Takizawa leg.

*Tagiades gana gana* (Moore): 1 ex., 24-26.VII.2010, H. Takizawa leg.

*Tagiades japetus balana* Fruhstorfer: 1 ex., 1.II.2011, N. Yamada leg.

TOTAL 147 spp.: subtotal 67 spp. (24-26.VII.2010); 92 spp. (11-12.VIII.2010); 85 spp. (31.I-1.II.2011).