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Results of the butterfly and moth inventory in Ghana I. (Lepidoptera: Lycaenidae)

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Abstract – Recent data (collected between 2001 and 2011 during several research surveys) on the distribution of 239 species of Lycaenidae (Lepidoptera: Rhopalocera) in Ghana are presented as the first results of the long-term research project "Butterfly and Moth Inventory and Prime Butterfly Areas in Ghana". *Aslauga* cf. *prouvosti*, *Pentila condamini* Stempffer, 1963, *Micropentila* Aurivillius, 1895 sp., *Teratoneura isabellae* Dudgeon, 1909, *Iridana agneshorvathae* Collins, Larsen et Sáfián, 2008, *Iridana* cf. *perdita*, *Cephetola nigra* (Bethune-Baker, 1903), and *Geritola albomaculata* (Bethune-Baker, 1903) are recorded as new in the Lepidoptera fauna of Ghana. Many records of other species are of biogeographical importance. With one figure.

Key words – Distribution data, Lepidoptera inventory, Lycaenidae, Ghana, West Africa.

INTRODUCTION

Concerning butterflies, Ghana is amongst the most extensively researched countries in West Africa with many recent publications (BOSSART *et al.* 2006, JOLY 2003, KÜHNE 1999, 2001, LARSEN 2005, 2006*a*, *b*, LARSEN *et al.* 2007, 2008) etc. But still there is much to be done, until the butterflies and their distribution in the country will become well researched. Lycaenidae is one of the least known butterfly families; quite a few species were recently described (COLLINS & LARSEN 2005, 2008, LIBERT 2007, 2010) with 'locus typicus' in Ghana, probably more remain to be discovered. The knowledge on butterflies in the region was summarised by LARSEN (2005) whose work is a milestone in the research of Papilionoidea and Hesperioidea in West Africa. The present project "Butterfly and Moth Inventory and Prime Butterfly Areas in Ghana", based partly on LARSEN's comprehensive work, was initiated in 2006 by the Butterfly Conservation Society, Ghana (BCGHANA). One of the many aims of this project is to fill the gaps in our knowledge on the distribution of butterflies in Ghana, especially within the protected areas network, community based conservation projects, forest reserves and other areas, which are still covered by natural vegetation. This paper, presenting distribution records in the family of Lycaenidae, is the first in a series, where we aim at presenting the results of the long-term inventory. The records were collected in several localities in Ghana between 2001 and 2011 mostly by SZABOLCS SÁFIÁN, TORBEN B. LARSEN, KWAKU ADUSE-POKU and GÁBOR CSONTOS of the Butterfly Conservation Society, Ghana supplemented by data from STEVE C. COLLINS of the African Butterfly Research Institute. Only a few records were previously mentioned in other works by LARSEN *et al.* (2007, 2008). ZSOLT BÁLINT curates the Ghana material (collected by SZABOLCS SÁFIÁN in 2001, 2003 and 2004) in the Lepidoptera collection of the Hungarian Natural History Museum, Budapest.

MATERIAL AND METHODS

Most observations and collectings were carried out in the Upper Guinean Forest Zone west of the Dahomey Gap, except Nakpanduri (Gambaga Escarpment), which lies on the boundary of the Guinea and Sudan savannah zones; two locations are situated in the forest-savannah transition zone (Boabeng-Fiema Monkey Sanctuary and Apapaso Camp, Digya National Park) and a few localities are situated in the Volta Region, inside the

Dahomey Gap between the River Volta and the Togo border. Although intrazonal forests historically dominated the landscape in the mountains of the Volta Region (mainly in the lower valleys but also on slopes), the distribution of forest is now very patchy in eastern Ghana. The majority of the good quality forests are confined to the Kyabobo National Park and a few tiny forest reserves. The amount of forest in the Volta Region outside of protected areas is now nearly negligible; most forests were converted into farmland, derived savannah bush or secondary growth. Most records from west of the Dahomey Gap were collected in rainforest of different types and stages of degradation, including semi-natural parklands or botanical gardens, mature secondary growth and primary forest. Other scattered records were collected in severely degraded or derived habitats from a few localities e.g. Taifa-Burkina. A short description of sampling localities is found below. The localities are figured on the outline map of Ghana (Fig. 1).

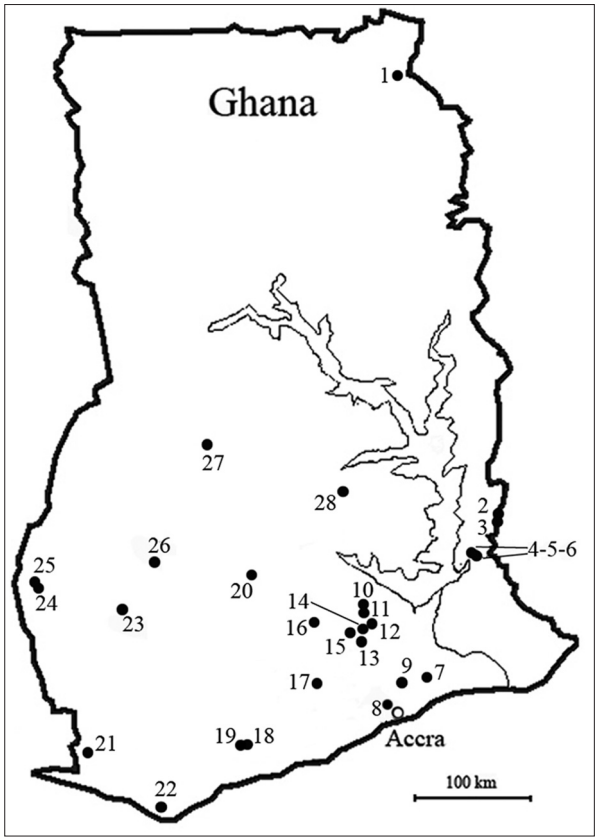

Fig. 1. The surveyed localities in Ghana (numbers, coordinates and descriptions are given in the text)

The majority of the Lycaenidae can be collected during general recording in suitable habitats with traditional hand-held nets, although a considerable number of interesting species require more specific collecting methods. Many species of Lycaenidae, especially in the subfamilies Theclinae and Lipteninae are regular hill-toppers; males congregate on and around the highest available points to locate receptive females. The visit of hilltops in the Volta Region revealed several interesting records of Theclinae in the genera *Aphnaeus* HÜBNER, [1819], *Hypomyrina* DRUCE, 1891 and *Iolaus* HÜBNER, [1819]. Many species in the Lipteninae subfamily are mymecophilous. They are therefore found near their ant hosts: various species of *Crematogaster* LUND, 1831. As most species of *Crematogaster* are arboreal, the best way to find Lipteninae was to identify the "ant-trees", which hosted the dark, carton-like nest of *Crematogaster*. Males usually displayed near ant-trees, species in the genera *Mimacraea*, BUTLER, 1872, *Mimeresia* STEMPFFER, 1961, *Eresina* AURIVILLIUS, 1898 and *Eresiomera* CLENCH, 1965 were often found circling around the tree-trunk. Females also stayed near these ant-trees, they were mainly active in the afternoon hours but they often sat on dry twigs or tendrils. Larvae of Lipteninae were also collected on ant-trees; as they often stay among foraging worker ants or rest on the bark, near the ant nest. Several species of Epitolini were bred from larvae during the surveys. Interesting records of Lycaenidae were collected by moth-lamp at several localities. The holotype of *Iridana agneshorvathae* was attracted by artificial light as well as other species such as *Lachnocnema* TRIMEN, 1887, *Iridana* AURIVILLIUS, 1921, *Iolaus* HÜBNER, [1819], *Cephetola* LIBERT, 1999 and *Pseudaletis* DRUCE, 1881.

The nomenclature and systematics follow the comprehensive work of LARSEN (2005) except in the genera *Anthene* DOUBLEDAY, 1847, *Cupidesthes* AURIVILLIUS, 1895 and *Neurellipes* BETHUNE-BAKER, 1910, where a revision by LIBERT (2010) revealed significant changes in the taxonomy. Type specimens of *Iridana agneshorvathae* and the undescribed *Micropentila* AURIVILLIUS, 1895 sp. were deposited in the Lepidoptera collection of the African Butterfly Research Institute, Nairobi (ABRI). Most specimens from SÁFIÁN's collectings in 2001, 2003 and 2004 (Wli Waterfalls, Bia National Park, Kakum National Park, Chirano Gold Mine) are deposited in the Lepidoptera collection of the Hungarian Natural History Museum, Budapest (HNHM), the majority of the specimens taken during the subsequent research trips are found in SÁFIÁN's private collection (Sopron, Hungary), some specimens of scientific interest have been presented to ABRI (indicated at the species records).

DESCRIPTION OF THE LOCALITIES

Upper East Region

1. **NAK – Nakpanduri, Gambaga Escarpment** – 10°38'34.09"N, 0°11'14.40"W. Nakpanduri, in the Upper East Region lies on the Gambaga Escarpment, a hilly area with Guinea savannah and riparian vegetation along small rivers and streams. The savannah is largely disturbed around towns and villages, although natural habitat patches are found on steeper slopes and rocky hilltops with trees of considerable age. The lycaenids collected here are of typical savannah country, including three mistletoe feeding *Iolaus*: *I. menas*, *I. ismenias* and *I. scintillans*.

Volta Region

2. **MAT – Likpe Mountain (Likpe Todome, Likpe Mate)** – 7°10'23.08"N, 0°36'45.56"E. The Likpe Mountain lies above the villages Likpe Todome and Likpe Mate is covered by dry forest, dense savannah and grass savannah transition, with perfect summits for hilltopping butterflies. It is also the only known habitat of *Capys vorgasi*, a narrowly endemic species, which is confined to the *Protea* bushes on the upper slopes and the hilltop of Likpe Mountain. Likpe Mate is the type locality for many butterfly species collected by the late catholic missionary priest and butterfly collector Father THEODOR MAESSEN, e.g. *Eresina theodori*, *Cephetola maesseni*, *Iolaus likpe* (LARSEN 2005).
3. **WLI – Wli Agumatsa Nature Reserve** – 7° 6'26.55"N, 0°36'16.63"E. The small wet forest, which lies along the stream leading to the Wli Waterfalls hosts about 500 butterfly species (LARSEN 2006*b*). The hilltops surrounding the waterfalls are covered with dry grassy savannah with sparse arboraceous vegetation.
4. **BAV – Biakpa-Avatime** – 6°51'7.77"N, 0°25'10.53"E. A mosaic type of habitat is found near Biakpa in the Togo Mountains, a real transition between guinea savannah on the hilltops and wet forest along the streams. The Lycaenidae fauna is very diverse, the forest species indicated mesophilous to dry forest type: *Pentila pauli*, *Liptena septistrigata*, *Liptena rochei*, *Pseudaletis leonis*, *Hypomyrina nomion* etc.
5. **VUM – Vume-Avatime** – 6°51'41.57"N, 0°24'8.83"E. The habitat is derived savannah with patches of drier secondary forest and farmlands.
6. **AME – Amedzofe and Mount Gemi** – 6°50'22.09"N, 0°25'53.62"E. Amedzofe village is situated at 650 metres above sea level and is the highest settlement in Ghana. The surrounding landscape was once formed by forest on the slopes and in the valleys; now the mountains are covered by secondary bush, derived savannah and farmland, but small fragments of forest may still be found in narrow valleys around the village, especially in the waterfalls area. The hilltop of Mount Gemi is dry savannah grassland, which provides the habitat for several savannah blues etc. *Cupidopsis cissus*, *Lepidochrysops parsimon*. The hilltops near the TV transmission mast are covered by dry secondary forest, which is rich in Lipteninae and the mistletoe-feeding *Iolaus* species.

Greater Accra Region

7. **SHH – Shai Hills, Accra Plains** – 5°53'10.25"N, 0°2'59.46"E. The Shai Hills Nature reserve is situated on the Accra Plains inside the Dahomey Gap and is an extrazonal guinea savannah habitat with patches of sparse dry forest (southern outlier type) on the slopes. Some of the true savannah species were found here only recently (*Euchrysops sahelianus*, *Cupidopsis jobates*) in addition to many already known.
8. **TAI – Taifa-Burkina, Accra** – 5°40'16.95"N, 0°15'29.27"W. The habitat is mostly urban garden parkland, farmland and disturbed savannah areas in the suburbs of Accra capital city. Only a few lycaenids were collected here in September 2006.

Eastern Region

9. **ABU – Aburi Botanical Garden** – 5°51'9.04"N, 0°10'27.61"W. The Garden of Aburi is an ancient parkland and secondary forest with mild, sub-mountainous climate. Many Lipteninae species have been recorded from here, some of which have been found: one such species is *Liptena tiassale*, which may be be quite common in the gardens: another is *Cephetola collinsi.* The reason for this is that the Garden has numerous old trees that provide an excellent habitat for arboreal *Crematogaster* ants, which host and protect Lipteninae larvae during their development. Apart from Lipteninae, the Garden is now not very rich in Lycaenidae, although two species of the rare *Pseudaletis* DRUCE, 1888 were also caught here recently.
10. **WOS – Apaa, Worobong South Forest Reserve** – 6°27'29.81"N, 0°27'31.65"W. Worobong South is contiguous with Southern Scarp Forest Reserve on the Kwahu Plateau. It is a wet forest in severely degraded condition due to excessive illegal logging, although the three short surveys in 2008, 2009 and 2010 provided a few interesting records.
11. **SSF – Dwenase, Southern Scarp Forest Reserve** – 6°23'23.43"N, 0°27'16.74"W. Only a few species were observed during a brief visit in October 2009 including some *Epitola* WESTWOOD, 1851 s.l.
12. **ADJ – Adjeikrom village, Fantiakwa District** – 6°18'28.30"N, 0°23'35.12"W. The habitats around the village are traditional cocoa plantations, which require shading by old forest trees. Only a few records were obtained here in October 2006.
13. **ASA – Asafo village, Kyebi District** – 6°10'15.51"N, 0°28'38.88"W. The habitat around the village is mostly disturbed cassava and plantain farmlands with patches of traditional (shaded) cocoa farms. Only a few Lycaenidae were recorded here in February 2004.
14. **BUN – Bunso Arboretum** – 6°16'2.66"N, 0°27'37.40"W. The habitat is a 16.5 hectares fragment of moist semi-deciduous forest and parkland with ancient indigenous and old introduced trees. Despite its small size a very rich community of Lycaenidae was found in the arboretum, including an *Iridana* possibly new to science and the new country record of *Teratoneura isabellae*, one of the most amazing of all Lipteninae.
15. **ATE – Sagyimaase, Atewa Range Forest Reserve** – 6°14'6.15"N, 0°33'36.21"W. The Atewa Range is one of the two remaining upland rainforests in Ghana. The diversity of butterflies is one of the highest in the Upper Guinean Forest zone; the estimated number of species is over 700 (LARSEN 2007). In Ghana *Mimeresia moyambina* and *Tetrarhanis stempfferi* are unique to Atewa; *Geritola albomaculata* was found at the foothills of Atewa as new to Ghana.
16. **ABE – Asuom Berebeso, Esukawkaw Forest Reserve** – 6°19'11.90"N, 0°50'36.69"W. Esukawkaw forest reserve is a lowland forest of the wetter type. It was extensively logged in the 1980–90s, so mature trees are sparse, at least along logging roads. A single short visit revealed interesting butterfly records, including an extremely rare skipper *Leona lota*.
17. **ODA – Big Tree, Essuboni Forest Reserve, Birim Central District** – 5°50'21.68"N, 0°49'14.67"W. The "Big Tree" or "Oda Big Tree" is known to be a largest forest tree

in West Africa. This magnificent *Tieghemela heckelii* specimen, which is now a tourist attraction is probably the last witness of the primary lowland rainforest, which once covered the area. The Essuboni Forest Reserve, which surrounds the tree, is constituted by a mixture of plantations of *Cedrela odorata* and *Gmelina arborea* and patches of natural secondary growth. In some areas the dense undergrowth supports rich butterfly fauna, which indicates forest of the wetter type.

Central Region

18. **GYA – Gyawale-Abrafo, Kakum Forest** – 5°21'35.77"N, 1°22'8.49"W. The area is approximately 40 hectares of private land, which is being developed for eco-tourism destination. It shares a boundary with the Kakum National Park. Lowland moist semi-deciduous forest constitutes a small part of the land here, while mature secondary growth, abandoned farmland, re-afforested area and parkland diversify the area. It is rich in Lipteninae, more than 30 species have been recorded from a small group of ant-trees. The extremely rare *Cupidesthes henryi* was also found here.
19. **KAK – Kakum National Park, Visitor Centre and Canopy Walkway Trail** – 5°21'26.89"N, 1°23'7.50"W. A few species were recorded on the tourist trails to the famous Canopy Walkway. The trail crosses mostly young and middle age secondary forest with scattered older trees.

Ashanti Region

20. **BOB – Bobiri Forest Reserve and Butterfly Sanctuary** – 6°41'13.55"N, 1°20'38.74"W. The habitats of Bobiri Butterfly Sanctuary were described in detail by LARSEN *et al.* (2007).

Western Region

21. **ANK – Nkwanta Camp, Ankasa Conservation Area** – 5°16'52.24"N, 2°38'25.40"W. Ankasa represents the wet evergreen forest, which is restricted to the south-western corner of Ghana. This type of rainforest is amongst the least researched habitats. Quite a few species occur here, which are commoner further west in the wetter forest types in Ivory Coast and Liberia e.g. *Mimeresia issia* and *Pilodeudorix leonina*. *Oboronia liberiana* and *Iridana exquisita* are known only from Ankasa in Ghana.
22. **C3P – Cape Tree Points Forest Reserve near Tumentu village** – 4°51'34.09"N, 2°3'31.34"W. The reserve is an isolated forest that covers roughly 50 km^2 in the wet evergreen forest zone. It is characterized with butterflies limited to the southwestern corner of Ghana e.g. *Charaxes hadrianus*, *Euriphene veronica* (LARSEN 2005). The forest is still in pristine condition despite the isolation from the nearest larger forest blocks: Ankasa, Draw River Forest Reserve. The holotype of a new species of *Micropentila* (to be described by BELCASTRO and LARSEN) was collected near Tumentu in December 2006.
23. **CHI – Chirano Gold Mine** – 6°24'54.67"N, 2°21'39.63"W. The Chirano Forest Reserve was opened for gold mining in 2005. The forest is restricted to the hills which

is also a catchment area for Kyinsu, Tano, Suraw and Chiraa rivers and was in good condition when SÁFIÁN visited in 2004 during the exploration for mining. The rare *Iridana incredibilis* was found here at moth light.

24. **BIA – Bia National Park, Research Centre** – 6°34'51.28"N, 3°2'21.28"W. Bia National Park is situated in the dry semi-deciduous forest zone near the Ivorian border. The forest was intensively logged during the 20th century, but shows regeneration since the activity ceased. Despite the disturbance the butterfly fauna remained intact. The research centre area is the type locality of *Iridana agneshorvathae.*
25. **BIN – New Debiso, Guest House area (Bia NP)** – 6°37'23.58"N, 3°3'45.90"W. The description of the habitat is as described at BIA above. The locality is just a few kilometres away from the research centre area.

Brong-Ahafo Region

26. **TAN – Mpasaso, Tano Ofin Forest Reserve** – 6°47'11.18"N, 2° 6'28.80"W. Tano Ofin, apart from the well-researched Atewa Range Forest Reserve, is the only upland rainforest in Ghana. Although severely degraded by legal and illegal logging activities and farming, it still hosts a number of interesting species according to recent collections by ABRI. In this paper we include only a few records from a single survey in 2009.
27. **BOA – Boabeng-Fiema Monkey Sanctuary** – 7°42'43.14"N, 1°41'41.66"W. LARSEN *et al.* (2008) give detailed account on the description of habitats at the Boabeng-Fiema Monkey Sanctuary.
28. **APA – Apapaso Camp, Digya National Park** – 7°20'35.88"N, 0°37'2.42"W. The abandoned Apapaso village (camp) lies in the dense (southern) Guinea savannah zone in Ghana. Although the butterfly fauna of the area might be richer compared to other savannah habitats, the single visit during the present survey revealed only a few commoner species.

RESULTS

A total of 239 species belonging to Lycaenidae were recorded from Ghana during various research trips between 2001 and 2011. Many of the species are very rare throughout West Africa; a new species of *Micropentila* (to be described by BELCASTRO and LARSEN) and *Iridana agneshorvathae* were found new to science during the present survey, while another *Aslauga* KIRBY, 1890 and an *Iridana* species are being investigated as possibly new (the latter is provisionally listed as *Iridana* cf. *perdita*). *Pentila condamini*, *Teratoneura isabellae*, *Cephetola nigra* and *Geritola albimacula* are recorded as new to Ghana, together with the undescribed species, they are marked with asterisk (*) at the species' account. The female of *Iolaus likpe* was found

for the first time in 2006 in Bobiri Forest Reserve and Butterfly Sanctuary and described in detail in COLLINS & LARSEN (2008). The full list of species and the localities are listed below, more information on records of rarer species is also provided. Lycaenidae records from Boabeng-Fiema Monkey Sanctuary are also published in LARSEN *et al.* (2008) in a different context, while the faunistic results from Bobiri Forest Reserve are partly published in LARSEN *et al.* (2007).

Subfamily Miletinae REUTER, 1896

Euliphyra hewitsoni AURIVILLIUS, 1899 – BOB, GYA – One female of this rare species was found on the boundary line of Bobiri Forest, where *Oecophylla* ants are quite abundant. The specimen was sitting on a bush early in the morning, flushed and resettled almost immediately. A male was caught in Gyawale under very similar conditions. All three specimens are deposited in SÁFIÁN's collection.

Euliphyra mirifica HOLLAND, 1890 – AME – A single female was caught near the hilltop of Mt. Gemi investigating *Oecophylla* ant-nests for laying on cultivated cashew trees (*Anacardium occidentale*). This was the third Ghana and the fourth West African record (LARSEN 2005). The single specimen collected is deposited in SÁFIÁN's collection.

Euliphyra leucyania (HEWITSON, 1874) – BAV, ABU, BUN, BOB – Only one female was found in Aburi and another in Bobiri during several visits in 2006–2009. Two males were also found displaying in the car park of Aburi Botanical Gardens, it patrolled the open space of the car park few times at a moderate speed then settled quite high on leaves. Another two males were found displaying (hilltopping) in Biakpa-Avatime, where they often settled on leaves of old mango trees, which hosted *Oecophylla* colonies. A few males were found under similar conditions around Bunso Guesthouse. All males attacked other butterflies entering their territories; they also fought each other. Their display was recorded between 2.00 and 3.00 p.m. Voucher specimens from all localities are deposited in SÁFIÁN's collection.

Aslauga marginalis KIRBY, 1890 – MAT, BAV, AME, ABU, BUN, ATE, BOB, ANK.

Aslauga lamborni BETHUNE-BAKER, 1914 – MAT, AME, BOB – Only one female of the species was found on the boundary line of Bobiri Forest. The specimen swooped down investigating the low vegetation at 2.00 p.m. The species seems to be slightly more common in the Volta Region. Voucher specimens from Bobiri and Likpe Mate are deposited in SÁFIÁN's collection.

**Aslauga* sp. (near *prouvosti*) – AME, BAV – One male specimen of this probably undescribed species was found sitting quite low on a leaf of a tree in a wooded savannah habitat. The specimen settled on grass after a short flight. Another male was later found in the nearby Mt Gemi in Amedzofe. The species is close to *A. prouvosti* with constant differences in the forewing shape. The male specimen was deposited in the ABRI collection.

Megalopalpus zymna (Westwood, 1851) – WOS, ATE, ASU, ABE, GYA, BOB, C3P, BIA.

Megalopalpus metaleucus Karsch, 1893 – SHH, ATE, BOB, C3P, BIA.

Spalgis lemolea pilos Druce, 1890 – SHH, ABU, BUN, ATE, BOB, BIA, BOA.

Lachnocnema emperamus (Snellen, 1872) – WLI – Two males were caught displaying in an open farmland near the nature reserve of the Wli Waterfalls. They were flying furiously, fighting each other early in the morning at 8.00 a.m. Voucher specimens are found in Sáfián's collection.

Lachnocnema vuattouxi Libert, 1996 – MAT, AME.

Lachnocnema disrupta Talbot, 1935 – AME – One female was caught on Mt. Gemi near Amedzofe, the specimen is found in Sáfián's collection.

Lachnocnema albimacula Libert, 1996 – BOB – A female specimen of this extremely rare species was caught at moth light in Bobiri Guesthouse during heavy rain with a female *Dapidodigma demeter*. This is the fifth known specimen from West Africa (Larsen 2005), deposited in Sáfián's collection.

Subfamily Lipteninae (Röber, 1892)

Ptelina carnuta (Hewitson, 1873) – MAT, WLI, BAV, AME, BUN, ATE, ODA, GYA, BOB.

Pentila pauli Staudinger, 1888 – MAT, WLI, BAV, AME, ABU, BUN, BOB, BOA.

**Pentila condamini* Stempffer, 1963 – BIA – The species was found new to Ghana from Bia National Park (Collins & Larsen 2008) as a single male specimen. It should be extremely rare since it is not easy to overlook this butterfly. The species becomes commoner further west of Ghana and can be abundant in Sierra Leone (Belcastro & Larsen 2006). The genitalia of the specimen was examined by Larsen (slide is found in ABRI), while the specimen remained in Sáfián's collection.

Pentila petreia Hewitson, 1874 – MAT, WLI, BAV. AME, ABU, BUN, ATE, GYA, BOB, ANK, BIA.

Pentila picena Hewitson, 1874 – WLI, BAV, AME, BUN, ATE, BOB, BIA.

Pentila phidia Hewitson, 1874 – AME, ATE, GYA, BOB, BIA.

Pentila hewitsonii Grose-Smith et Kirby, 1887 – ATE, BOB – Only a dozen specimens of this rare species were found in the Atewa Range between 2005 and 2009. One specimen was also recorded from Bobiri (Larsen *et al.* 2007). Voucher specimens from Atewa are found in Sáfián's collection.

Telipna acraea (Westwood, 1851) – MAT, BUN, ATE, GYA, BIN.

Telipna semirufa (Grose-Smith et Kirby, 1889) – BUN, ATE, BOB.

Telipna maesseni Stempffer, 1970 – MAT, WLI, BAV.

Ornipholidotos nympha Libert, 2000 – WOS, ATE, BIA – Only singletons were found of this rare species in each locality. Voucher specimens are deposited in Sáfián's collection.

Ornipholidotos tiassale Stempffer, 1969 – BOB, BIA.

Torbenia wojtusiaki Libert, 2000 – ABE, BOB.

Mimacraea neurata HOLLAND, 1895 – WLI, BAV, AME, ABU, BUN, ATE, GYA, BOB.
Mimacraea darwinia BUTLER, 1872 – ATE, KAK, BIA.
Mimacraea maesseni LIBERT, 2000 – MAT, WLI.
Mimeresia libentina (HEWITSON, 1866) – MAT, WLI, BAV, ABU, BUN, ATE, GYA, BOB, C3P, BIN, BOA.
Mimeresia moyambina (BETHUNE-BAKER, 1904) – ATE – This extremely rare species is known only from a few localities in West Africa (Sierra Leone, Ivory Coast), and it was recently discovered on the Atewa Range in Ghana (LARSEN 2005). One male and two female specimens were found on Atewa in 2007, all specimens are deposited in SÁFIÁN's collection.
Mimeresia semirufa (GROSE-SMITH, 1902) – BOB, BUN, BIA.
Mimeresia cellularis (KIRBY, 1890) – WLI, ATE, BIN.
Mimeresia issia STEMPFFER, 1969 – ATE, ODA, ANK – Only a few specimens of this rare species were found recently; the records show association with wetter type of forest. Voucher specimens from all localities are deposited in SÁFIÁN's collection.
Pseuderesia eleaza (HEWITSON, 1873) – MAT, BAV, BUN, BOB.
Eresiomera bicolor (GROSE-SMITH et KIRBY, 1890) – MAT, WLI, BAV, ABU, BUN, ATE, KAK, GYA, BOB, C3P, ANK.
Eresiomera isca occidentalis COLLINS et LARSEN, 1998 – ADJ, BUN, BOB – The species was found uncommon in Bobiri Forest in September 2006. Surprisingly one male specimen was also recorded from a traditional shaded cocoa farmland area in Adjeikrom. Voucher specimens from all localities are deposited in SÁFIÁN's collection.
Eresiomera petersi (STEMPFFER et BENNETT, 1956) – KAK, BIA.
Citrinophila marginalis KIRBY, 1887 – MAT, WLI, ABU, BUN, ATE, GYA, BOB.
Citrinophila similis (KIRBY, 1887) – MAT, BAV, ABU, BUN, ATE, GYA, BOB.
Citrinophila erastus (HEWITSON, 1866) – WOS, BUN, ATE, GYA, BOB, BIA.
Eresina maesseni STEMPFFER, 1956 – BIA.
Eresina pseudofusca STEMPFFER, 1961 – MAT, BAV, AME, ABU, GYA.
Eresina theodori STEMPFFER, 1956 – MAT, ABU, BUN, GYA, BOB.
Argyrocheila undifera STAUDINGER, 1892 – BIA – Only one specimen of this elusive species was found, flying weakly, low down in a forest path close to an old ant-tree near Bia Research Centre. The specimen is found in SÁFIÁN's collection.
Liptena submacula submacula LATHY, 1903 – WLI, BUN, ATE, ODA, BOB, BIA.
Liptena submacula maesseni STEMPFFER, BENNETT et MAY, 1974 – MAT, WLI, BAV, AME.
Liptena griveaudi STEMPFFER, 1969 – BOB – A single specimen of this extremely rare species was caught around Bobiri Guesthouse (LARSEN *et al.* 2007) followed by a second one in the same year. One voucher specimen is found in SÁFIÁN's collection.
Liptena simplicia MÖSCHLER, 1887 – BUN, ATE, ASU, GYA, BOB, C3P, ANK, BIA, BIN.
Liptena tiassale STEMPFFER, 1969 – ABU, BUN – The species was known only from the Aburi Botanical Gardens in Ghana (LARSEN 2005), until one specimen was caught in the Bunso Arboretum in October 2009. The species received vulnerable (VU) status recently in IUCN's red list (LARSEN 2011). Voucher specimens from both localities are deposited in SÁFIÁN's collection.

Liptena alluaudi Mabille, 1890 – MAT, WLI, WOS, BUN, ATE, ASU, ODA, GYA, BOB, BIN.

Liptena pearmani Stempffer, Bennett et May, 1974 – MAT – Only a single specimen was found in November 2010 resting low in the undergrowth of lowland secondary forest near Likpe Mate. The specimen is deposited in Sáfián's collection.

Liptena septistrigata (Bethune-Baker, 1903) – MAT, WLI, AME, ABU, BUN, GYA, BOB.

Liptena xanthostola (Holland, 1890) – BUN, GYA, BOB, BIA, BIN.

Liptena rochei Stempffer, 1951 – WLI, BAV.

Liptena bia Larsen et Warren-Gash, 2008 – BUN, GYA – This recently described species was caught in a few specimens from the Kakum Forest. The Bunso specimen is lighter in colour than usual *L. bia*. Voucher specimens are deposited in the ABRI and Sáfián's collection.

Liptena flavicans oniens Talbot, 1935 – BUN – Quite a few specimens of this rare species were found in Bunso Arboretum. Males come regularly to display among other hilltopping butterflies at the guesthouse at about 2:00 p.m. Voucher specimens are deposited in Sáfián's collection.

Liptena similis (Kirby, 1890) – BUN, ATE, ABE, BOB, C3P – It is a rare species, which was recorded from good quality forests in low numbers. Recently one specimen was found in Asuom Berebeso (April 2005) and another one in Cape Three Points Forest Reserve (December 2006), while it was quite common on the Atewa Range and in Bobiri in October 2007, also in Bunso in November 2009. Voucher specimens from Bobiri and Atewa are deposited in Sáfián's collection.

Liptena helena (Druce, 1888) – BUN, ATE, BIA, ANK.

Liptena catalina (Grose-Smith et Kirby, 1887) – ATE, GYA, ANK.

Kakumia otlauga (Grose-Smith et Kirby, 1890) – MAT, WLI, BUN, ATE, GYA, BOB, BIA, ANK.

Falcuna leonensis Stempffer et Bennett, 1963 – WOS, BUN, ATE, ASU, ABE, GYA, BOB, BIA, BIN.

Falcuna campimus (Holland, 1890) – WOS, BUN, ATE, GYA, BOB, ANK.

Tetrarhanis baralingam (Larsen, 1998) – ATE, C3P, ANK.

Tetrarhanis stempfferi (Berger, 1954) – ATE.

Tetrarhanis symplocus Clench, 1965 – MAT, WLI, AME, ABU, BUN, ATE, ODA, GYA, BOB, C3P, CHI, BIA, BIN.

Larinopoda aspidos Druce, 1890 – MAT, WLI, AME, BAV.

Larinopoda eurema (Plötz, 1880) – WOS, ABU, BUN, ATE, ASU, ABE, ODA, GYA, BOB, C3P, BIA, BIN.

Micropentila adelgitha (Hewitson, 1874) – ATE, GYA, C3P, BIA, ANK.

Micropentila dorothea Bethune-Baker, 1903 – MAT, BAV – Only three specimens were found during the present research in the Volta Region in November 2010 and October 2011. All were resting on dry twigs in the undergrowth of drier secondary forest in Biakpa or old cocoa plantation in Likpe Mate. Voucher specimens are deposited in Sáfián's collection.

* *Micropentila* sp. n. (to be described by BELCASTRO and LARSEN) – C3P, ANK, ATE – A few specimens, including a female of this undescribed species were caught in Ghana's wetter types of forests. The preliminarily designated type specimen and other specimens were deposited in the ABRI collection.

Micropentila brunnea (KIRBY, 1887) – GYA – Only one male specimen was found of this rare species, sitting on a dry twig two metres above the ground. The specimen is deposited in SÁFIÁN's collection.

* *Teratoneura isabellae* DUDGEON, 1909 – BUN – Although the presence of the species was expected in Ghana (LARSEN 2005), it was most surprising to find it in a small isolated rainforest area in Bunso Arboretum. The only specimen found was a female sitting moderately low on a dry creeper; it is deposited in SÁFIÁN's collection.

Iridana incredibilis (STAUDINGER, 1891) – MAT, ABU, BUN, GYA, CHI – Three specimens (two males and one female) of this species were caught at moth light in the Chirano Gold Mine, February 2004. To years later another specimen was collected at light in Aburi Botanical Gardens. Further, freshly hatched specimens are also known from Aburi, they were mostly drying themselves on the bark of ant-trees, quite low down, where caterpillars have also been observed (some specimens resembled of *I. rougeoti*, which we do not consider as a valid species but only an individual variation of *I. incredibilis*). Many specimens are deposited in SÁFIÁN's collection.

Iridana exquisita (GROSE-SMITH, 1898) – ANK – A single male specimen was bred from pupa found on an ant-tree near Nkwanta Camp, Ankasa National Park. The only previously known specimen was found very close to this locality at moth light (LARSEN 2005). The bred specimen was deposited in the ABRI collection.

* *Iridana* cf. *perdita* (KIRBY, 1890) – BUN – A small series of both sexes of this possibly undescribed species of *Iridana* were bred from larvae and pupae in March and October 2009 in the Bunso Arboretum. It closely resembles to *I. perdita*, although the closest known population of the latter is found in Cameroon, thousands of kilometres away. Interestingly, the same or a closely related species was found in western Liberia in February 2011 by SÁFIÁN (unpublished). Two males and two females of this *Iridana* were deposited in the ABRI collection, while further four specimens are deposited in SÁFIÁN's collection.

Iridana nigeriana STEMPFFER, 1964 – ABU – It is a rare and local species, which was found regularly in the Aburi Botanical Gardens in low numbers (LARSEN 2005). One male specimen was caught in November 2007 during the present survey, which is deposited in the ABRI collection.

Iridana agneshorvathae COLLINS, LARSEN et SÁFIÁN, 2008 – AME, BIA – The species was described from a male specimen in 2008, caught at moth light (Bia Research Centre) (COLLINS & LARSEN 2008). It is most probably a canopy species, which rarely comes down to ground level. The second specimen was one of the most surprising records during the surveys. A male was caught in the Volta Region (Amedzofe) by ABRI collectors. Both specimens are deposited in the ABRI collection.

Hewitsonia boisduvalii (HEWITSON, 1869) – WOS, ABU, BUN, ATE, GYA, BOB, BIA, BIN, ANK.

Hewitsonia occidentalis BOUYER, 1997 – WLI, ABU, BUN, GYA.

Hewitsonia inexpectata Bouyer, 1997 – MAT, WLI, ABU, BUN, GYA, BOB, BIA.

Cerautola crowleyi (Sharpe, 1890) – MAT, BAV, AME, ABU, BUN, BOB – The life-style and behaviour of the three Ghanaian *Cerautola* Libert, 1999 have recently been published by Sáfián & Larsen (2009). The majority of new records (see also *C. ceraunia* and *C. miranda*) were revealed by breeding of the caterpillars of all *Cerautola* species in the last few years. Many voucher specimens are deposited in Sáfián's collection, covering all localities.

Cerautola ceraunia (Hewitson, 1873) – BUN, ATE, GYA, BOB, BIA, ANK.

Cerautola miranda (Staudinger, 1889) – MAT, BAV, AME, ABU, BUN, GYA, BOB.

Epitola posthumus (Fabricius, 1793) – BAV, WOS, ABU, BUN, ATE, BOB – The large *Epitola* species can be best caught with a decoy (a piece of shining blue fabric or plastic), which they often investigate by swooping down from the canopy at high speed. Both males and females may be seen feeding on extrafloral nectar of fresh shoots of Marantaceae or creeping *Acacia*. The three "large *Epitola*" species might occur in full sympatry in good quality forests, *E. posthumus* is moderately common. Voucher specimens for most localities are deposited in Sáfián's collection.

Epitola urania Kirby, 1887 – BOB, BIN – This is the rarest member of the large *Epitola* group, only one female from Bobiri (November 2006) and two females from New Debiso were recorded during our survey. Voucher specimens are deposited in Sáfián's collection.

Epitola uranoides Libert, 1999 – WLI, AME, ATE, BOB, GYA.

Cephetola cephena (Hewitson, 1873) – MAT, BAV, AME, BOB, GYA.

Cephetola subcoerulea (Roche, 1954) – ABU, BAV, BUN, ATE.

* *Cephetola nigra* (Bethune-Baker, 1903) – BUN, BOB, BIA – The species was collected as new to Ghana in Bia National Park in 2006 when a male was caught at a moth light. In May 2007 in Bobiri one female was caught flying rather slowly late in the afternoon in an open area along the main logging road. The third Ghana specimen is also a female, observed in Bunso Abroretum in October 2011. All three specimens from Ghana are deposited in Sáfián's collection.

Cephetola mercedes ivoriensis (Jackson, 1967) – BUN, BIA.

Cephetola obscura (Hawker-Smith, 1933) – ABU, WOS, ATE, GYA.

Cephetola sublustris (Bethune-Baker, 1904) – ABU.

Cephetola collinsi Libert et Larsen, 1999 – ABU, BUN.

Hypophytala hyettoides (Aurivillius, 1895) – MAT, WLI, BAV, ABU, ADJ, BUN, ATE, GYA, BOB.

Hypophytala hyettina (Aurivillius, 1897) – ATE, GYA, BOB – Only a few recent records are known of the species, one male was caught on the slopes of Atewa near an old ant tree in November 2007. It replaced a displaying *H. hyettoides* male immediately after its capture at 11:30 a.m. One male was also caught early morning in Bobiri in November 2006. It was flushed from sitting on dry twigs some two metres above the ground. Displaying males were seen in Gyawale between 11:00 and 12:00 a.m. and one female was bred from a caterpillar, found on the vegetation next to an ant-tree in October 2007. Voucher specimens are deposited in Sáfián's collection.

Hypophytala henleyi (KIRBY, 1890) – GYA, BOB – Only very few recent records of this species are known from Ghana from November 2006. Two males were caught displaying and perching on a *Hibiscus* bush in the park of Bobiri Butterfly Sanctuary between 8:30 and 9:00 a.m., the flight was very powerful and erratic similar to other *Hypophytala* species. The Gyawale specimens were bred from caterpillars found below a *Crematogaster* ant nest in October 2007. Voucher specimens are deposited in SÁFIÁN's collection.

Hypophytala benitensis (HOLLAND, 1890) – BOB – In the recent years only a few males were found of this species at exactly the same spot as *H. henleyi* (LARSEN *et al.* 2007). The males were displaying from as early as 7:30 a.m. until 8:00–8:30. During flight they could not have been separated from *H. henleyi*, apart from the displaying time. Voucher specimens are deposited in SÁFIÁN's collection.

Geritola gerina (HEWITSON, 1878) – MAT, BAV, ABU, GYA, BOB.

* *Geritola albomaculata* (BETHUNE-BAKER, 1903) – ATE, ANK – The first specimen of this species in Ghana was caught in Sagyimaase village (Atewa Range) in November 2007: a female was flying between park trees in the garden of the town school. One male from Ankasa National Park was bred from caterpillar in October 2008. Both specimens are deposited in SÁFIÁN's collection.

Geritola virginea (BETHUNE-BAKER, 1904) – MAT, ABU, BUN, GYA, BOB.

Stempfferia cercene (HEWITSON, 1873) – GYA, BOB.

Stempfferia moyambina (BETHUNE-BAKER, 1903) – BUN, ATE, GYA, ANK.

Stempfferia dorothea (BETHUNE-BAKER, 1904) – BUN, BOB.

Stempfferia leonina (STAUDINGER, 1888) – MAT, BUN, ATE, BOB.

Stempfferia michelae LIBERT, 1999 – BAV, ATE, GYA, BOB.

Stempfferia ciconia (GROSE-SMITH et KIRBY, 1892) – BUN, GYA, BOB.

Stempfferia zelza (HEWITSON, 1873) – MAT, BUN – The Bunso specimen – caught in October 2009 – was a surprising record, as the species was not known from west of the Dahomey Gap. A few species, believed to have the western boundary of their range at the river Volta just penetrate the forest area west of the Dahomey Gap (e.g. *Papilio nobicea* SUFFERT, 1904, *Neptis angusta* CONDAMIN, 1966), and can be found in the Atewa Range or the surrounding forest patches like Bunso. Voucher specimens from both localities are deposited in SÁFIÁN's collection.

Stempfferia kholifa (BETHUNE-BAKER, 1904) – BOB, C3P.

Stempfferia staudingeri (KIRBY, 1890) – BUN, GYA, BOB.

Aethiopana honorius (FABRICIUS, 1793) – BUN, ATE, GYA, BOB.

Epitolina dispar (KIRBY, 1887) – WLI, WOS, BUN, ATE, ODA, GYA, BOB, C3P, BIN.

Epitolina melissa (DRUCE, 1888) – BUN, ATE, GYA, BIN.

Epitolina catori BETHUNE-BAKER, 1904 – MAT, WLI, BAV, ABU, BUN, GYA, BOB, BIA.

Neaveia lamborni DRUCE, 1910 – MAT, ABU, BUN.

Subfamily Theclinae SWAINSON, 1830

Myrina silenus (FABRICIUS, 1775) – BAV, BUN, GYA – This savannah species was quite common in Gyawale (Kakum Forest) in February and March 2005. Voucher specimens from Kakum (Gyawale) are deposited in SÁFIÁN's collection.

Myrina subornata LATHY, 1903 – NAK, MAT, BAV – One specimen was found in Biakpa (December 2006) and Likpe Mate (March 2008) by RICHARD VORGAS in dry forest and savannah transition habitat. Several specimens were seen around a fruiting fig tree in dry savannah habitat near Nakpanduri in November 2010 by SIMON YEVU. Voucher specimens were deposited in ABRI collection.

Oxylides faunus (DRURY, 1773) – MAT, ABU, WOS, BUN, ATE, ODA, GYA, BOB, C3P, ANK, BIA, BIN.

Dapidodigma hymen (FABRICIUS, 1775) – BAV, AME, BUN, GYA, BOB, ANK.

Dapidodigma demeter CLENCH, 1961 – AME, BAV, BOB, BIA, BOA.

Aphnaeus orcas (DRURY, 1782) – MAT, WLI, ATE, GYA, BOB, BIA.

Aphnaeus brahami LATHY, 1903 – MAT – Our knowledge about this rarer *Aphnaeus* is very limited. They are certainly avid hill-toppers, as *A. brahami* is known only from the summit of Likpe Mountain. The males start their display at about 13:00. The species might be more common in the second half of dry season and the beginning of rainy season (March-May). Voucher specimens are deposited in ABRI and SÁFIÁN's collection.

Aphnaeus gilloni STEMPFFER, 1966 – AME – This savannah butterfly is a regular visitor of the hilltop of Mt. Gemi in Amedzofe. Males arrive at their usual hill-topping spots at about 11:00. The butterfly seems to be seasonal, they usually hatch in numbers by the end of the dry season (late March, April, May). Voucher specimens are deposited in ABRI and SÁFIÁN's collection.

Spindasis mozambica (BERTOLINI, 1850) – WLI, BAV.

Spindasis iza (HEWITSON, 1865) – BOB.

Axiocerses harpax (FABRICIUS, 1775) – SHH, GYA, C3P.

Lipaphnaeus leonina (SHARPE, 1890) – ATE – One female specimen was caught flying fast along the Sagyimaase forestry access road in the Atewa Range in April 2005 and another one in October 2009. Voucher specimens are deposited in SÁFIÁN's collection.

Pseudaletis agrippina warrengashi LIBERT, 2007 – ABU – Two males were circling, sometimes fighting high up near an ant-tree in the Aburi Botanical Gardens just before the outbreak of a rainstorm in May 2007. It was twilight from the clouds, almost like at dusk. During fight they sometimes swooped down with surprisingly high speed. Voucher specimens are deposited in SÁFIÁN's collection.

Pseudaletis leonis (STAUDINGER, 1888) – MAT, BAV, ABU, BOB.

Pseudaletis richardi STEMPFFER, 1952 – GYA – The first Ghana female of this extremely rare species was caught in light drizzle near Kakum National Park. The specimen was sitting on an oil palm leaf at about 9 a.m. some four metres above the ground several hundred metres away from real forest habitat. It is deposited in the ABRI collection.

Pseudaletis jolyana LIBERT, 2007 – BUN – The species was formerly known only from a few specimens, all caught at moth light in the Atewa Range, the type locality (LIBERT 2007). The Bunso specimen was also attracted by artificial light in October 2009, deposited in the ABRI collection.

Iolaus eurisus (CRAMER, 1779) – AME, ABU, ASA, BUN, GYA.

Iolaus menas DRUCE, 1890 – BAV – One female specimen was bred from a caterpillar found on mistletoe in a savannah area near Biakpa. It is deposited in SÁFIÁN's collection.

Iolaus iulus HEWITSON, 1869 – MAT, WLI, BAV, AME, ABU, ABE, BIA.

Iolaus ismenias (KLUG, 1834) – NAK, SHH.

Iolaus alcibiades KIRBY, 1871 – MAT, ABU, WOS, GYA, BOB, CHI – A female specimen was found dead on the ground in Bobiri Forest. Other *Iolaus* were collected under similar conditions from several localities. Many voucher specimens are deposited in the ABRI and SÁFIÁN's collection.

Iolaus parasilanus maesseni (STEMPFFER et BENNETT, 1958) – ABU, BIA.

Iolaus paneperata DRUCE, 1890 – ABU, ATE – A male specimen of this rare species was found dead on the old logging road of Atewa in 2006. A pair was later caught in Sagyimaase village around a mistletoe infested citrus tree. Voucher specimens are deposited in SÁFIÁN's collection.

Iolaus lukabas DRUCE, 1890 – ATE – A single female of this species was found on the lower slopes of Atewa. It was investigating a mistletoe-infested tree. The specimen is deposited in SÁFIÁN's collection.

Iolaus likpe COLLINS et LARSEN, 2003 – MAT, BOB – The female of this species was described in COLLINS & LARSEN (2008). The Bobiri specimen is the first record from west of the Dahomey Gap (LARSEN *et al.* 2007), deposited in the ABRI collection.

Iolaus calisto (WESTWOOD, 1851) – MAT, AME, ABU, BUN, GYA.

Iolaus laonides AURIVILLIUS, 1898 – BOB – LARSEN (2005) found no recent records of this species during his research for the West Africa book. Only two specimens were caught during the present surveys in Bobiri. The first one came to light, while the second one was resting in the undergrowth in the Arboretum area. Both placed as voucher specimens in SÁFIÁN's collection.

Iolaus timon (FABRICIUS, 1787) – BUN.

Iolaus scintillans AURIVILLIUS, 1905 – NAK, AME.

Iolaus laon HEWITSON, 1878 – MAT, WLI, BAV, ABU.

Iolaus sappirus (DRUCE, 1902) – BOB.

Iolaus bellina (PLÖTZ, 1880) – WLI, GYA.

Iolaus aethria KARSCH, 1893 – WLI, BAV, ABU, ATE, ASU, GYA.

Iolaus iasis HEWITSON, 1865 – AME, SHH, BOB, BIN.

Iolaus maesa (HEWITSON, 1862) – MAT, BUN, GYA – Males of *I. maesa* can be observed regularly on the mistletoe infested orange trees in front of the Bunso guesthouse. They were also observed hill-topping on the Likpe Mountain. Voucher specimens from all localities are deposited in SÁFIÁN's collection.

Hypolycaena philippus (FABRICIUS, 1793) – NAK, BAV, SHH, TAI, BIA, ANK.

Hypolycaena liara DRUCE, 1890 – BOB.

Hypolycaena lebona (HEWITSON, 1865) – WLI, ATE, BOB.

Hypolycaena clenchi Larsen, 1997 – WLI, ATE, BOB.
Hypolycaena scintillans Stempffer, 1957 – WLI, AME, ABU, BUN, ATE, GYA, BOB, BOA.
Hypolycaena dubia Aurivillius, 1895 – WLI, ABU, ATE, BOB, BIN.
Hypolycaena kakumi Larsen, 1997 – WLI, BOB.
Hypolycaena antifaunus (Westwood, 1851) – WLI, BAV, ATE, ABE, BOB, BOA.
Hypolycaena hatita Hewitson, 1865 – WLI, AME, ATE, GYA, BOB, C3P.
Hypolycaena nigra Bethune-Baker, 1914 – WLI, BUN, ATE, BOB, GYA.
Pilodeudorix camerona (Plötz, 1880) – MAT, WLI, BAV, AME, SHH, ABU, BUN, BOB.
Pilodeudorix diyllus (Hewitson, 1878) – AME, BOB, ANK.
Pilodeudorix caerulea (Druce, 1890) – BUN, GYA.
Pilodeudorix catori (Bethune-Baker, 1903) – AME – It is generally a rare species, only a few specimens were recorded from the dry woodland near Amedzofe. Larsen (2005) recorded it from dry coastal forest near Kissi (Central Region). Voucher specimens from Amedzofe are deposited in Sáfián's collection.
Pilodeudorix virgata (Druce, 1891) – ODA, ANK – The species is an indicator of wetter types of forest in Ghana. Only a couple of specimens were seen in Ankasa, low down resting on the undergrowth and one in the Essuboni Forest Reserve under similar conditions. Voucher specimens are deposited in Sáfián's collection.
Pilodeudorix otraeda (Hewitson, 1863) – AME, ATE, GYA.
Pilodeudorix leonina (Bethune-Baker, 1904) – GYA, ANK.
Pilodeudorix aurivilliusi (Stempffer, 1954) – AME, BAV, ABU, BUN, ATE.
Pilodeudorix violetta (Aurivillius, 1897) – AME – A few females of this canopy species were recorded on a flowering bush in October 2011.Voucher specimens are found in Sáfián's collection.
Paradeudorix eleala (Hewitson, 1865) – MAT, WLI, VUM, AME, ABU, ASA, BUN, ATE, BOB.
Hypomyrina nomion (Staudinger, 1891) – BAV – The species was common only on a wooded hilltop at Biakpa-Avatime where males were displaying in the morning hours. Larsen (2005) recorded it also from secondary habitats near Cape Coast. Voucher specimens from Biakpa are deposited in Sáfián's collection.
Deudorix antalus (Hopffer, 1855) – MAT, AME, TAI, ABU, BOB, BIN.
Deudorix lorisona (Hewitson, 1862) – NAK, SHH, MAT, WLI, BAV, AME, SHH, ABU, ATE, GYA, BOB, BOA.
Deudorix dinomenes diomedes Jackson, 1966 – VUM.
Deudorix galathea (Swainson, 1821) – ABU, GYA, ANK.
Deudorix caliginosa Lathy, 1903 – BOB.

Subfamily Polyommatinae Swainson, 1827

Anthene larydas (Cramer, 1780) – MAT, WLI, AME, BAV, ABU, WOS, BUN, ATE, ASU, ODA, GYA, KAK, BOB, BIN, BOA.

Anthene agumatsa LIBERT, 2010 – WLI, ATE, BOB – All former Ghanaian records of *A. ligures* refer to this rare, newly described species. It turned out to be specifically distinct from *A. ligures* during the revision of the genus (LIBERT 2010). Voucher specimens are deposited in SÁFIÁN's collection.

Anthene sylvanus (DRURY, 1773) – MAT, WLI, AME, WOS, BUN, ATE, ASU, GYA, BOB, C3P, BIA, BIN, BOA.

Anthene rubricinctus derubescens LIBERT, 2010 – WLI, WOS, BUN, ATE, ASU, ABE, GYA, BOB, ANK.

Anthene starki LARSEN, 2005 – MAT.

Anthene lunulata grosei (AURIVILLIUS, 1898) – ATE, ASU, GYA, BIN.

Anthene maesseni LIBERT, 2010 – AME – The species was separated recently from its East African vicariant *A. wilsoni* (TALBOT, 1935). Only a single specimen was caught by GÁBOR CSONTOS during the present research in savannah grassland on the hilltop of Mount Gemi, which is the type locality. The specimen is deposited in SÁFIÁN's collection.

Anthene liodes monteironis (KIRBY, 1878) – MAT, WLI, ATE, ASU, GYA, BOB, BOA.

Anthene amarah (GUÉRIN-MÉNEVILLE, 1849) – HAN, BIN.

Anthene leonina (BETHUNE-BAKER, 1903) – BUN, BOB, BOA.

Anthene irumu (STEMPFFER, 1948) – VUM, GYA, BOB.

Anthene crawshayi (BUTLER, 1899) – ATE, ABU, BOB.

Cupidesthes lithas (DRUCE, 1890) – AME, WOS, ATE, ASU, ABE, ODA, GYA, BOB, BIA.

Cupidesthes henryi LIBERT, 2010 – GYA – The species was recently separated from its Central African vicariant, *C. mimetica* (DRUCE, 1910). All former Ghanaian records of *C. mimetica* from Ghana refer to *C. henryi* (LIBERT 2010). Only two males were caught in a secondary forest near Kakum National Park, the species is very rare in Ghana. Both specimens are deposited is SÁFIÁN's collection.

Cupidesthes jacksoni STEMPFFER, 1969 – BIA, BIN.

Neurellipes lusones (HEWITSON, 1874) – AME, BUN, ATE, TAN, ANK.

Neurellipes fulvimacula (MABILLE, 1890) (= *N. chryseostictus* (BETHUNE-BAKER, 1910)) – BUN, ATE, GYA, BOB, TAN.

Neurellipes kampala incerta LIBERT, 2010 – GYA – The presence of this species in West Africa and Ghana was justified by the revision of *Anthene* by LIBERT (2010), who described *incerta* as the western subspecies of *N. kampala* BETHUNE-BAKER, 1910, which occurs from Gabon to Sierra Leone. During the revision 17 specimens have been identified in different collections, Kakum Forest was not amongst the known localities. The specimen from Gyawale is deposited in SÁFIÁN's collection.

Neurellipes erythropoecilus locuples (GROSE-SMITH, 1898) – WLI, BUN, BOB – This is a rare and elusive species, which popped up unexpectedly from two localities during the surveys: Bunso and Bobiri. Voucher specimens from Bunso and Wli are deposited in the ABRI and SÁFIÁN's collection.

Neurellipes juba (FABRICIUS, 1787) – ATE, GYA.

Neurellipes lachares (HEWITSON, 1878) – ATE, ASU, ABE, ODA, GYA, BOB, C3P.

Neurellipes atewa Larsen et Collins, 1998 – ATE, ANK – This is an endemic species to the forest zone west of the Dahomey Gap, which inhabits wetter types of forests in Ghana. Males can be found singly, in the dense undergrowth of forest, where they usually sit on leaves in sunny spots, similarly to other species in the genus. Voucher specimens are deposited in the ABRI and Sáfián's collection.

Neurellipes lysicles (Hewitson, 1874) – WLI, AME, ABU, ATE, GYA, BOB, BIN.

Neurellipes lyzanius (Hewitson, 1874) – WLI, ATE, ASU, GYA, BOB, C3P.

Triclema lucretilis (Hewitson, 1874) – MAT

Triclema lamias (Hewitson, 1878) – AME.

Triclema obscura (Druce, 1910) – BAV.

Triclema nigeriae (Aurivillius, 1905) – BAV, VUM.

Triclema hades (Bethune-Baker, 1910) – WLI, ABU, ATE, GYA.

Monile gemmifera maculata Libert, 2010 – MAT, BAV – A savannah species, which is local and rare in West Africa. The few localities also indicate a submontane distribution, including upland rainforest areas (e.g. Tano Ofin, Atewa) (Libert 2010). During the present surveys, single male specimens were obtained in the Togo Mountains. Voucher specimens from both localities are deposited in Sáfián's collection.

Pseudonacaduba sichela (Wallengren, 1857) – WLI, VUM, SHH, GYA, BOB, BOA.

Lampides boeticus (Linnaeus, 1767) – NAK, AME, SHH, GYA.

Uranothauma falkensteini (Dewitz, 1879) – MAT, WLI, BAV, AME, ABU, WOS, BUN, ATE, ASU, GYA, BOB.

Phlyaria cyara stactalla Karsch, 1895 – WLI, BAV, AME, ATE, ASU, GYA, BOB, ANK, BIA, BIN.

Cacyreus lingeus (Stoll, 1782) – MAT, WLI, AME, BAV, TAI, ABU, ATE, GYA, BOB, BOA.

Cacyreus audeoudi Stempffer, 1936 – BUN, BOB, GYA – This elusive forest species is very rare in Ghana, Larsen (2005) did not find it during his research for his West Africa book. Surprisingly it turned up from three localities in 2008. Voucher specimens are deposited in Sáfián's collection.

Leptotes pirithous (Linnaeus, 1767) – MAT, WLI, AME, SHH, ABU, BUN, ATE, BOB, GYA, BOA.

Tuxentius carana (Hewitson, 1876) – MAT, WLI, VUM, AME, BUN, ATE, ASU, ABE, ODA, GYA, OBU, BOB, CHI, BIN.

Tuxentius cretosus nodieri (Oberthür, 1883) – NAK.

Actizera lucida (Trimen, 1883) – WLI.

Eicochrysops hippocrates (Fabricius, 1793) – WLI, VUM, SHH, ABU, BUN, ATE, ASU, GYA, OBU, BOB, CHI, BIN.

Cupidopsis jobates (Hopffer, 1855) – SHH.

Cupidopsis cissus (Godart, [1824]) – MAT, WLI, AME, BAV.

Euchrysops albistriata greenwoodi d'Abrera, 1980 – MAT, WLI.

Euchrysops malathana (de Boisduval, 1833) – MAT, WLI, AME, SHH, ABU, BUN, ATE, ASU, BOB, CHI, BIN, BOA.

Euchrysops osiris (Hopffer, 1855) – NAK, WLI, BAV, VUM, SHH, ASA, GYA, BIN.

Euchrysops barkeri (Trimen, 1893) – WLI, AME, BAV.

Lepidochrysops parsimon (FABRICIUS, 1775) – AME, BIN.
Lepidochrysops synchrematiza (BETHUNE-BAKER, 1923) – BAV, AME.
Lepidochrysops quassi KARSCH, 1895 – MAT, AME.
Thermoniphas micylus (CRAMER, 1780) – WLI, VUM, AME, BAV, ABU, WOS, BUN, ATE, ASU, GYA, BOB, OBU, CHI, ANK.
Oboronia punctatus (DEWITZ, 1879) – WLI, ASA, ATE, BIN, BOA.
Oboronia liberiana STEMPFFER, 1950 – C3P, ANK, BIN.
Oboronia pseudopunctatus (STRAND, 1912) – MAT, WLI, AME.
Oboronia guessfeldti (DEWITZ, 1879) – WLI, AME, ABU, WOS, BUN, ASA, ATE, ASU, BOB, BIN, BOA.
Oboronia ornata (MABILLE, 1890) – MAT, WLI, AME, BAV, ASA, BUN, ATE, ASU, GYA, KAK, BOB, BIA, BIN.
Azanus jesous GUÉRIN-MÉNEVILLE, 1847 – BOB.
Azanus mirza (PLÖTZ, 1880) – AME, WLI, ABU, BUN, ATE, ASU, GYA, BOB, BIA, BIN, BOA, APA.
Azanus isis (DRURY, 1773) – MAT, WLI, AME, BAV, ATE, GYA, BOA.
Chilades trochylus BETHUNE-BAKER, 1924 – SHH
Zizeeria knysna (TRIMEN, 1862) – MAT, WLI, AME, SHH, ABU, BUN, BOB, BIA, BIN, BOA.
Zizina otis antanossa (MABILLE, 1877) – BAV, SHH, ABU, BIA.
Zizula hylax (FABRICIUS, 1775) – MAT, WLI, VUM, BAV, AME, BUN, ATE, GYA, OBU, BOB, BIN.

SUMMARY

After an extensive period of research by TORBEN LARSEN in the 1990s and early 2000s the inventory of the butterfly fauna of Ghana still continues to develop at a slow pace. During the present research period 239 species of Lycaenidae were recorded, including two species recognised as new to science (*Micropentila* sp., *Iridana agneshorvathae*), another two possibly new (*Aslauga* sp., *Iridana* cf. *perdita*) and four new country records (*Pentila condamini*, *Teratoneura isabellae*, *Cephetola nigra* and *Geritola albomaculata)*. Changes in the taxonomy added another few and names also changed for several species, especially in the *Anthene* s.l.: e.g. *M. gemmifera maculata*, *Triclema kampala incerta*. A number of records of little known species were also compiled, which are important for the better understanding of the biogeography of the Lepidoptera fauna of Ghana. *Stempfferia zelza*, for example, was first recorded from west of the Dahomey Gap, while the range of *Geritola albomaculata* – a species, previously believed to occur only in the Liberian subregion – expanded significantly with records from Ankasa and Atewa.

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