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Editorial

Periodically, it has been suggested that the ‘scientific’ and ‘popular’ content of *Metamorphosis* should be published separately, the former in a ‘scientific journal’ and the latter in a ‘newsletter’. This approach has been followed for many years by the Lepidopterists’ Society of North America.

Debate around this issue has produced both pros and cons. This editorial column is not the place to air such pros and cons – the ideal place and time would be the Annual General Meeting of the Society. This takes place at Potchefstroom in November this year. This AGM and conference will celebrate the Societies’ 21st birthday and promises to be a memorable event, from both the scientific and social view points. The program is already well advanced – make sure that you do not miss the chance to participate in it!

This issue of *Metamorphosis* consists of a single review article by the Henning brothers on the East and Southern African *Teriomima* group of poritine lycaenids. The next issue will consist largely of less scientific, but equally interesting, contributions by a number of our members.

A review of the liptenid *Teriomima* Kirby genus group (Lepidoptera:Lycaenidae:Poritiinae) with descriptions of a new genus, a new subgenus, ten new species and four new subspecies

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Abstract: The *Teriomima* genus group, consisting of the genera *Teriomima* Kirby, *Baliochila* Stempffer & Bennett, *Cnodontes* Stempffer & Bennett, *Euthecta* Bennett, and *Eresinopsides* Strand, is reviewed. A new genus *Congdonia* and a new subgenus *Chrystina* are described. Ten new species and four new subspecies, *Teriomima* (*Teriomima*) *williamsi*, *Teriomima* (*Chrystina*) *parva* *beylissi*, *Euthecta* *cooksoni* *subgrisea*, *E. cooksoni* *marginata*, *E. cordeiroi*, *Baliochila* *abri*, *B. citrina*, *B. collinsi*, *B. confusa*, *B. fusca*, *B. megadentata*, *B. latimarginata* *rondoensis*, *Eresinopsides* *bamptoni* and *Congdonia* *duplex*, are described. *Baliochila* *petersi* is transferred to the genus *Eresiomera* and *Pseuderesia* *issia* is synonymised with *Baliochila* *petersi*. *Teriomima* *micra* and *T. parva* are recombined as *Teriomima* (*Chrystina*) *micra* and *T. (C.) parva*, respectively. *Baliochiola* *aslanga* is redescribed. *Baliochila* *woodi* *mwanihanae* is raised to *B. mwanihanae*. *Cnodontes* *vansoni* is synonymised with *C. penningtoni*.

Key words: Lycaenidae, Poritiinae, Liptenina, liptenid, *Teriomima* genus group, species group, taxonomy.

INTRODUCTION

This paper is the result of an African Butterfly Research Institute (ABRI) research program. This study was based on by the extensive material collected in Tanzania by Colin Congdon and Ivan Bampton, and their research assistants, which is housed at ABRI in Kenya.

The previous major work on this group of butterflies was the revision of the genus *Teriomima* by Stempffer & Bennett 1953. These authors described two new genera, *Baliochila* and *Cnodontes*, eight new species and a new subspecies. No revision has since been done, although a number of species have been described in the interim, particularly in the genus *Baliochila*. A history of the genus *Teriomima* is included in Stempffer & Bennett 1953.

MATERIALS AND METHODS

Besides the extensive material in ABRI a number of other collections were studied, including that of the Transvaal Museum in Pretoria. Private collections studied were: Curle Trust Collection, Henning Collection, Kroon Collection, McDermott Collection, Owen-Johnston Collection, Teare Collection, and Woodhall Collection. Other African butterfly collectors were contacted and asked to contribute any interesting specimens. Information on habitats, habits and life histories was obtained from Congdon and Bampton as well as from many of the lepidopterists currently working on African liptenids in order to obtain a better understanding of the biology of these butterflies. No complete life history appears to have been compiled for any species.

The material used by Stempffer & Bennett 1953 was based largely on the specimens in the Natural History Museum, London. More than 1,450 specimens were studied by them. The number of specimens used in the present study amounted to more than 3,600. Of this total approximately 67% were members of the genus *Baliochila*, 20% *Teriomima*, 11% *Cnodontes* and 2% *Eresinopides*.

Genitalia were studied by boiling abdomens in a 15% solution of potassium hydroxide for 20-30 minutes. The genitalia were dissected from the abdomen under a dissecting microscope. They were cleaned, the aedoeagi were removed, and both parts were mounted flat, the main armature from a posterior aspect. The specimens were mounted in canada balsam in xylene solution. Photographic prints were made of all mounts through a monocular microscope using an Asahi Pentax 35 mm camera with microscope attachment. Other body parts, such as palps and legs, were descaled in a similar fashion. The wing venations of specimens were studied by immersing them in benzine and taking a digital image with a Sony Mavica digital camera.

RESULTS

The Subfamily Poritiinae of the Family Lycaenidae appear to be paraphyletic and are divided into two tribes, the Liptenini in Afrotropical Region and the Poritiini in the Oriental Region. (Ackery *et al.* 1999).

There are more than 600 species in about 50 genera in the Liptenini. The tribe is constituted by three subtribes: Pentilina, Durbaniina and Liptenina (Larsen in prep., Williams 2002).

Some species of the Liptenini are so unusual in colour and pattern that they were not originally described as Lycaenidae. Many species are involved in mimicry complexes.

The larvae of Liptenini feed on blue-green algae (Cyanophyta), the only butterflies known to do so, those of Poritiini feeding on Fagaceae. Liptenine larvae browse on blue-green algae, either directly or on algae that are part of lichens (Bampton 1995, Kielland 1990). The larvae are hairy and the pupae

generally retain the discarded larval skin as a covering for the abdomen. Most species are associated with *Crematogaster* ants and can often be found around or inside the ants' nests (Larsen in prep., Williams 2002).

TRIBE LIPTENINI

KEY TO SUBTRIBES OF THE TRIBE LIPTENINI

1. Underside of wings with spinules on veins, labial palpi very small .. Pentilina
 - Underside of wings without spinules on veins, labial palpi normal .. 2
2. Hind wing with precostal vein; antenna with short, broad, flattened club, nudum confined to upper half; proboscis very short .. Durbaniina
 - Hind wing without precostal vein; antenna without short, broad, flattened club, nudum not confined to upper half; proboscis moderately short .. Liptenina

KEY TO GROUPS WITHIN THE SUBTRIBE LIPTENINA

1. Uncus composed of two large, and asymmetric, hemispherical lobes .. Mimacraea group.
 - Uncus not composed of two large, asymmetric, hemispherical lobes .. 2
2. Forewing veins R5 and M1 widely separated at origin .. Epitola group
 - Forewing veins R5 and M1 closely separated at origin .. 3
3. Forewing cubital veins curved downwards, Sc+R1 recurved .. Teratoneura group
 - Forewing cubital veins not curved downwards, Sc+R1 not recurved .. Liptena group

LIPTENA GROUP

About 240 species. The largest genus is *Liptena*. There are many forest species, none have been recorded from the Capensis Zone.

KEY TO GENUS GROUPS OF THE LIPTENA GROUP

1. Forewing veins R5 and M1 closely separated at origin .. Liptena genus group
 - Forewing veins R5 and M1 with a long stalk .. 2
2. R2 stalked on R5 .. Pseuderesia genus group
 - R2 not stalked on R5 .. 3

3. R2 not originating near upper angle of cell .. *Citrinophila* genus group
- R2 originating near upper angle of cell .. 4

4. Eighth tergite ending in a bifid process, aedoeagus with long spines ..
Toxochitona genus group
- Eighth tergite not ending in a bifid process, aedoeagus without long spines ..
Teriomima genus group

LIST OF SPECIES IN GENUS GROUPS OF THE *LIPTENA* GROUP

***Liptena* genus group:**

Liptena Westwood 1851 – 67 species
Tetrarhanis Karsch 1893 – 15 species
Kakumia Collins & Larsen 1998 – 3 species
Obania Collins & Larsen 1998 – 3 species
Falcuna Stempffer & Bennett 1963 – 17 species
Larinopoda Butler 1871 – 6 species
Micropentila Aurivillius 1895 – 33 species

***Pseuderesia* genus group:**

Eresina Aurivillius 1898 – 18 species
Pseuderesia Butler 1874 – 4 species
Eresiomera Clench 1965 – 20 species

***Citrinophila* genus group:**

Argyrocheila Staudinger 1892 – 3 species
Citrinophila Kirby 1897 – 7 species

***Teriomima* genus group:**

Teriomima Kirby 1887 – 5 species
- *Chrystina* subgen. n. – 2 species
Euthecta Bennett 1954 – 2 species
Baliochila Stempffer & Bennett 1953 – 27 species
Cnodontes Stempffer & Bennett 1953 – 4 species
Congdonia gen. n. – 1 species
Eresinopsides Strand 1911 – 2 species

***Toxochitona* genus group:**

Toxochitona Stempffer 1956 – 4 species

SUBTRIBE LIPTENINA

The groups comprising the subtribe Liptenina can be separated, as per the key, with regard to the genitalia and wing venation. The appearance of the species within the subtribe Liptenina show a variety of defence mechanisms. There are the slow-flying colourful mimics of the *Mimacraea* group and the *Teratoneura* group, which contains a single species. The *Epitola* group consists largely of fast-flying species with iridescent blue flash coloration as a defence mechanism. The *Epitola* group includes the genus *Deloneura*, which has a relatively slow flight and a cryptic yellow coloration. This is also the only genus in the group that is restricted to the east African zone.

The *Liptena* group consists of some small mimetic species and many yellow or white species, all of which are slow-flying. The *Pseuderesia* genus group consists of species with a distractive orange and black coloration. The *Citrinophila* genus group consists of the genus *Citrinophila* that has species with a bright yellow ground colour and black borders that closely resemble the pierid genus *Eurema* Hübner, and *Argyrocheila* that consists of species which are creamy-white with small black spots, also resembling pierids. The *Toxochitona* genus group consists of yellow species with cryptic coloration.

The *Liptena* group can be divided into west and east African components, with the *Teriomima* genus group representing the eastern component. As with the genus *Deloneura* of the *Epitola* group, the *Teriomima* genus group exhibits similar cryptic coloration. This parallel development is assumed to be the result of the drier woodland and forest habitats found in the eastern parts of Africa when compared to those of the wetter western forests.

The *Teriomima* genus group displays the following characteristics: Wings with costa and termen convex, hind wing oval, forewing with 11 or 12 veins with vein R2 originating near the upper angle of the cell. Wings generally with a cryptic yellow coloration.

In the male genitalia the “special processes” are evident in *Baliochila*, *Cnodontes*, *Eresinopsides* and *Congdonia*. These consist of a pair of symmetrical processes, of variable size, the bases of which are firmly attached to the dorsal face of the anellus internally, the outer margin being attached to the tegumen by a semi-membranous connection (special processes Fig. 78 s). In *Cnodontes* and *Congdonia* the special processes are divided in two to form two independent pairs, one attached to the tegumen (tegumen processes Fig. 98 t) the other to the anellus (anellus lobes Fig. 98 al). In the natural position these processes extend horizontally, on the axis of the abdomen, between the uncus and the aedoeagus. They are not subunci as they are not articulated to the uncus/tegumen suture. In *Teriomima* (*Teriomima*) and *Congdonia* there is a harpe on the inner margin of the valve that is also characteristic of the genus group.

TAXONOMIC NOTE

Eresiomera petersi Stempffer & Bennett 1956 **comb. n.**

Baliochila petersi Stempffer & Bennett 1956, *Bulletin de l'Institut Français d'Afrique Noire* (A) **18**: 503. **Type locality**: [Liberia]: "Kpaine, 1.400 pieds (7°10' N, 9° 7' W)".

= *Pseuderesia issia* **syn. n.**

Pseuderesia issia Stempffer 1969. Liste des Lépidoptères Lycaenidae de Côte d'Ivoire actuellement connus. *Bulletin de l'Institut fondamental pour l'Afrique Noire*, sér. A, **31**: 935.

The following comments are by T.B. Larsen *in Butterflies of West Africa*, in prep. "The species was originally described from Liberia as *Baliochila petersi* Stempffer & Bennett, 1956. The holotype in the Natural History Museum, London is clearly identical with the species later described as *Pseuderesia issia* Stempffer, 1969, now placed in the genus *Eresiomera*, and the descriptions match as well. It was placed in *Baliochila* because the specialized genitalia figured in the 1956 paper are genuinely those of a *Baliochila*, but they must definitely have been from another butterfly. The presence of a member of the genus *Baliochila* in West Africa was always highly improbable."

KEY TO THE GENERA AND SUBGENERA OF THE TERIOMIMA GENUS GROUP

1. Forewing with 11 veins; on hind wing R5 and M1 arising from common stem .. 2
 - Forewing with 12 veins; on hind wing R5 and M1 not arising from common stem .. 3
2. Hind wing M3 and CuA1 distinctly separate at origin; male genitalia with large bifid anellus lobe; valve with large serrated harpe .. *Congdonia* **gen. n.** (Fig. 113)
 - Hind wing M3 and CuA1 not distinctly separate at origin; male genitalia without large bifid anellus lobe; valve without large serrated harpe .. *Eresinopsides* (Fig. 114)
3. Male genitalia with uncus fused to eighth tergite; tegumen with long digitate processes .. *Cnodontes* (Fig. 98)
 - Male genitalia with uncus not fused to eighth tergite; tegumen without long digitate processes .. 4

4. Male genitalia with aedeagus distally very long and slender .. *Euthecta* (Fig. 77)

- Male genitalia with aedeagus not distally very long and slender .. 5

5. Male genitalia without special processes .. 6

- Male genitalia with special processes .. *Baliochila* (Fig. 78)

6. Hind wing underside plain with black spots, male hind wing upper side without patch of specialized scales; male genitalia with large pointed harpe on valve .. *Teriomima* (Fig. 71)

- Hind wing underside not plain and without black spots, male hind wing upper side with specialized patch of scales; male genitalia without large pointed harpe on valve .. *Chrystina* subgen. n. (Figs 18, 75)

Biology of *Teriomima* genus group

The male genitalic adaptations evident in this group of butterflies indicate that the pheromone and wing-pattern cues may be insufficient to ensure specific integrity and that the various species rely on these genitalic adaptations to ensure exclusivity. This appears to be borne out by the subgenus *Chrystina*, which has a postdiscal patch of modified scales on the hind wing. It also has the least modified male genitalia in the group.

The species all have cryptic or distractive coloration. The species with a prominent orange costa of the upper side hind wing is presented so as to split the butterfly in half. In dense foliage this would effectively distract a potential predator and is a feature used in many other genera. It is also possible that this split-wing adaptation may mimic small wasps or some other unpalatable insect. The yellow coloration may resemble falling leaves in flight. There are also mimicry rings among the Lepidoptera in which many of the liptenids fall, including those of the *Teriomima* genus group.

HABITAT AND ECOLOGY

Inhabit woodland and forest. The climate is warm and wet for many of the more tropical species. Adults fly slowly and erratically, with frequent changes of direction. Their weak flight often takes them among the twigs and leaves of trees. Male territories are sometimes established around trees on or near the summits of hills. After alighting on a stem or twig specimens often partially open and close their wings in a peculiar, slow manner; or they may slowly sway slightly from side to side with wings folded. Specimens can be found feeding on nectaries or congregating at communal roosts, often on particular trees or patches of grass. Adults have been recorded feeding on the secretions of membracid sap-sucking

insects. The adults are often gregarious around certain trees but do not reappear at the same tree the following season, probably due to the absence of a food source. Females fly at random in search of food-plants on which to lay eggs. They fly more slowly than males but can be just as difficult to follow as they fly among tree branches. Eggs are laid singly or in small clusters on the algal food-plant, often in the late afternoon. Eggs take about fourteen days to hatch. On emergence larvae do not eat the discarded egg-shell as their first meal. They feed on algae growing on bark or in lichens, sometimes eating furrows in which to conceal themselves. The larvae secrete themselves where their camouflage is most effective. The larvae are very hairy. During pupation the larval skin is only partially shed, forming a protective covering over the abdomen of the pupa. Pupae resemble a piece of bark. Adults of the various species are not on the wing throughout the year, each species having a limited flight period, with most peaks being in October, December and March (Clark and Dickson 1971, Bampton pers. comm.)

EARLY STAGES

The only published record is that of Clark: Egg: 0.5 mm diam. x 0.3 mm high. Pale dull yellow darkening at the sides. The surface is covered with large circular indentations, each within a circle of six small moles. First instar larva: 0.8 mm on emergence, growing to 1.6 mm in 10 days. On emergence the larva is light grey with a black head and very long setae, being longest at the anal end where they are more than twice the length of the body, and curving down to the substrate. No further information is available (Clark and Dickson 1971: 244, Plate 114) [*Baliochila aslanga*]. Pupa: The larval skin is partially shed and it rolls down to form a protective covering over most of the abdomen. The pupa is grey to brown and resembles a piece of bark (Bampton pers. comm.).

LARVAL FOOD-PLANTS

Tree lichens (Lichenes) (Clark and Dickson 1971: 244); algae (Cyanophyta) on trees (Pringle *et al.* 1994: 135).

ANT ASSOCIATION

The larvae of most species are associated with *Crematogaster* ants in trees. The ants presumably provide protection from predators, the hairs on the larvae, in turn, protecting them from the ants. Larvae also live in furrows with only the hair protruding, which also protects them from the ants (Bampton pers. comm.).

DISTRIBUTION

Eastern and southern Africa. The exact distributions are given under each species.

Members of the *Teriomima* genus group are largely tropical and subtropical forest species, occurring in both coastal and montane forests. The genus

Cnodontes occurs in woodland areas, from KwaZulu-Natal northwards to Kenya, and westwards to Botswana and the Democratic Republic of Congo. *Cnodontes* species are largely allopatric, each occupying large areas of woodland.

The following twenty localities show the distribution of the forest species (excluding *Cnodontes*), although some species of *Baliochila* do occur in woodland, as indicated. Some localities have up to eight species occurring sympatrically. The number of species recorded is indicated in brackets ('s'), together with the number of species for which the localities in square brackets is the type locality ('t'). This list is superimposed on a map of the East African montane forest habitats (World Conservation Monitoring Centre) as Fig. 116.

1. Central coast, KwaZulu-Natal, South Africa [Pinetown] (s1, t1).
2. 'Zululand', KwaZulu-Natal, South Africa [Hluhluwe] (s3, t1).
3. Subcoastal Mozambique [Dondo] (s4, t2).
4. Interior Mozambique [Vunduzi River] (s3, t1).
5. Eastern Border, Zimbabwe [Mineni Valley] (s3, t1).
6. Central woodland of Zimbabwe [Bromley] (s1, t1).
7. Mlanje Mountain, southern Malawi (s6, t4).
8. Zambia, Shaba - DRC, western Tanzania and northern Malawi (s3, t0).
9. Rondo Plateau, Tanzania (s8, t6).
10. Mafia Island, Tanzania (s1, t1).
11. Udzungwe Mountains, Tanzania (s5, t3).
12. Uluguru Mountains, Tanzania (s5, t1).
13. Nguru Mountains, Tanzania (s8, t2).
14. Usambara Mountains, Tanzania (s11, t5).
15. Northern Tanzania interior [Arusha] (s2, t1).
16. Coastal Tanzania (s6, t1).
17. Southern Kenya coast [Mombasa, Kilifi] (s11, t4).
18. Central Kenya coast [Witu, Tana River] (s3, t3).
19. Central Kenya [Nairobi, Meru] (s5, t2).
20. Western Kenya [South Kavirondo] (s1, t1).

CHECKLIST OF SPECIES IN THE *TERIOMIMA* GENUS GROUP

Teriomima Kirby 1887

Teriomima (Teriomima) subpunctata Kirby 1887

Teriomima (Teriomima) puella Kirby 1887

Teriomima (Teriomima) puellaris (Durbania puellaris) Trimen 1894

Teriomima (Teriomima) williami sp. n.

Teriomima (Teriomima) zuluana van Son 1949

***Chrystina* subgen. n.**

Teriomima (Chrystina) micra (Durbania micra Grose-Smith 1898),
comb. n.

Teriomima (Chrystina) parva parva Hawker-Smith 1933, comb. n.

Teriomima (Chrystina) parva beylissi subsp. n.

***Euthecta* Bennett 1954**

Euthecta cooksoni cooksoni Bennett 1954

Euthecta cooksoni subgrisea subsp. n.

Euthecta cooksoni marginata subsp. n.

Euthecta cordeiroi sp. n.

Baliochila* Stempffer & Bennett 1953**Aslanga* species group**

Baliochila aslanga (Liptena aslanga Trimen 1873)

Baliochila barnesi Stempffer & Bennett 1953

Baliochila neavei Stempffer & Bennett 1953

Baliochila hildegarda (Teriomima hildegarda Kirby 1887)

Baliochila dubiosa Stempffer & Bennett 1953

***Minima* species group**

Baliochila minima (Teriomima minima Hawker-Smith 1933)

Baliochila amanica Stempffer & Bennett 1953

Baliochila latimarginata latimarginata (Teriomima minima
latimarginata Hawker-Smith 1933)

Baliochila latimarginata rondoensis subsp. n.

Baliochila lipara Stempffer & Bennett 1953

Congdoni* species group*- *Congdoni* subgroup**

Baliochila congdoni Kielland 1990

Baliochila warrengashi Collins & Larsen 1996

- *Lequeuxi* subgroup

Baliochila lequeuxi Kielland 1994

Baliochila confusa sp. n.

Nyasae* species group*- *Nyasae* subgroup**

Baliochila nyasae Stempffer & Bennett 1953

Baliochila collinsi sp. n.

Baliochila megadentata sp. n.

- *Nguru* subgroup

Baliochila nguru Kielland 1986

Baliochila citrina sp. n.

Baliochila abri sp. n.

- *Fragilis* subgroup

Baliochila fragilis Stempffer & Bennett 1953

Baliochila pseudofragilis Kielland 1976

Stygia species group

Baliochila stygia Stempffer & Bennett 1953

Baliochila fusca sp. n.

Woodi species group

Baliochila woodi (*Teriomima woodi* Riley 1943)

Baliochila mwanihanae Congdon, Kielland & Collins 1998, stat. n.

Baliochila pringlei Stempffer 1967

Singularis species group

Baliochila singularis Stempffer & Bennett 1953

***Cnodontes* Stempffer & Bennett 1953**

Cnodontes pallida (*Durbania pallida* Trimen 1898)

Cnodontes penningtoni Bennett 1954

= *Cnodontes vansoni* Stempffer & Bennett 1956, syn. n.

Cnodontes vansomereni Stempffer & Bennett 1953

Cnodontes bouyeri Kielland 1994

***Congdonia* gen. n.**

Congdonia duplex sp. n.

***Eresinopsides* Strand 1911**

Eresinopsides bichroma bichroma Strand 1911

Eresinopsides bichroma jefferyi Stempffer 1950

Eresinopsides bamptoni sp. n.

***Teriomima* genus group**

Teriomima Kirby 1887

Annals and Magazine of Natural History (5) **19**: 364.

Type-species: *Teriomima subpunctata* Kirby, by original designation.

Head small; eyes glabrous, frons brown to black with two white lines laterally; labial palpi long, ascending, second segment stout and laterally compressed, third segment slender, with brown and white scales, third joint white-tipped; antennae short with a distinct subcylindrical club, black, ringed with white, club black with ochreous tip; thorax short and slender, black with ochreous scales and hairs; male forelegs with unsegmented tarsi, clothed beneath with fine spines, black ringed with white. Costa and termen convex; hind wing oval. Forewing with 12 veins.

Genitalia, male. Uncus bifid, with narrowing pointed processes; tegumen fairly wide, vinculum medium; special processes absent; valves oblong with long gently curved harpe, apices falcate, aedeagus ventrally curved into a flattened 's', distally blunt, with two ventrally directed lobes.

The characters and genitalia of the genus are described and figured by Stempffer & Bennett 1953 and Stempffer 1967. See also Aurivillius 1925, Hemming 1967 and Eliot 1973.

KEY TO THE SPECIES OF *TERIOMIMA* (*TERIOMIMA*)

1. Ground colour white .. *subpunctata*
- Ground colour yellow .. 2
2. Underside with a large spot at end of cell of hind wing .. 3
- Underside without a large spot at end of cell of hind wing .. 4
3. Forewing upper side apical patch large, inner margin straight .. *puella*
Forewing upper side apical patch not large, inner margin sinuate .. *williami*
4. Forewing upper side apical patch large, inner margin not angled .. *puellaris*
- Forewing upper side apical patch not large, inner margin angled .. *zuluana*

Teriomima (Teriomima) subpunctata Kirby 1887, Figs 1a, 1b, 71.

Teriomima subpunctata Kirby 1887, *Annals and Magazine of Natural History* (5) **19**: 364.

Type locality: "West Africa" (*patria falsa*)

delicatula Kirby 1890 *Annals and Magazine of Natural History* (6) **6**: 269. [Tanzania]: "Usugara". Synonymized by Stempffer & Bennett 1953.

Figures: Adult figured in Aurivillius 1925, Stempffer & Bennett 1953, D’Abrera 1980, and Larsen 1991. Male genitalia figured in Stempffer & Bennett 1953.

Distribution: Kenya coast: Shimba Hills; Rabai; Arabuko-Sokoke (Larsen 1991). Eastern Tanzania: Rondo Plateau; Usambara Mts; Uzungwa rift; Uluguru Mts; Nguru Mts; Nguu Mts (Kielland 1990).

Habitat: Coastal and lowland forest, from sea level to 1 200 m (Kielland 1990).

Habits: Specimens settle on dry twigs and exposed shoots (Kielland 1990). Often roosts in small groups on the young tendrils and shoots of creepers (Larsen 1991).

Genitalia, male (Fig. 71). Uncus bifid, broad at base, narrowing to blunt points, ventrally inclined, no subunci; tegumen fairly wide, vinculum medium; special processes absent; valves oblong with long curved harpe, apices falcate, aedoeagus long and ventrally curved into a flattened ‘s’, distally blunt with two ventrally directed lobes.

Teriomima (Teriomima) puella Kirby 1887, Fig. 72.

Teriomima puella Kirby 1887, *Annals and Magazine of Natural History* (5) **19**: 365.

Type locality: “West Africa” (*patria falsa*)

Figures: Adult figured in Aurivillius 1925, Stempffer & Bennett 1953, Gifford 1965, D’Abrera 1980, Pringle *et al.* 1994 (in part). Male genitalia figured in Stempffer & Bennett 1953.

Distribution: Eastern Tanzania: Masagati Forest south of Ifakara; Uzungwa rift; Mikumi National Park; Pugu Hills; Uluguru Mts; Ukaguru Mts; Nguru Mts; Nguu Mts; Usambara Mts (Kielland 1990). Zambia: North-east and Petauke district (Heath *et al.* 2002). Malawi: Mlanje; Bandawe; Nkata Bay (Gifford 1965). Mozambique: Not recorded. The Dondo Forest records cited in Pringle *et al.* 1994 are erroneous and refer to *Teriomima (Teriomima) williami* sp. n., described below.

Habitat: Heavily wooded areas, riverine vegetation and open forests, from near sea level to 1 000 m (Kielland 1990). Also inhabits the fringes of submontane evergreen forest, particularly *Newtonia* gallery forests on south-west slopes (Gifford 1965).

Genitalia, male (Fig. 72). Similar to *T. subpunctata* but with narrower valves and a shorter and more sharply curved harpe. Aedoeagus with ventral projecting lobes narrower and shorter.

Teriomima (Teriomima) puellaris (Trimen 1894), Fig 73.

Durbania puellaris Trimen 1894, *Proceedings of the Zoological Society of London* **1894**: 59.

Type locality: [Mozambique]: “Vunduzi River”.

Figures: Adult figured in D’Abrera 1980, Pringle *et al.* 1994. Male genitalia figured in Stempffer & Bennett 1953.

Distribution: Zimbabwe (eastern border) and adjacent Mozambique. Tanzania: One specimen below Lulanda Forest, Mufindi (requires confirmation).

Habitat: Montane forest.

Habits: Adults flutter below the forest canopy and along the fringes.

Genitalia, male (Fig. 73). Similar to *T. subpunctata* but with uncus lobes more slender; harpe shorter; aedeagus with very distinctive ventral lobes, long sinuate and tapering, distal end of aedeagus forming a small point.

Teriomima (Teriomima) zuluana van Son 1949, Fig. 74.

Teriomima zuluana van Son 1949, *Annals of the Transvaal Museum* **21** (2): 211.

Type locality: South Africa: “Hluhluwe”.

Figures: Adult figured in D’Abrera 1980, Pringle *et al.* 1994. Male genitalia figured in Stempffer & Bennett 1953.

Distribution: South Africa: KwaZulu-Natal (northern coastal areas).

Habitat: Coastal and sand forest.

Habits: Adults fly weakly among tree branches below the forest canopy. May be found in adjacent woodland. Males have been observed to establish territories along forest edges and one specimen established a territory on a barbed-wire fence (pers. obs.).

Genitalia, male (Fig. 74). Similar to *T. subpunctata* but with uncus lobes curved; valves elongate and narrower; aedeagus shorter, ventral lobes shorter.

***Teriomima (Teriomima) williamsi* sp. n.**, Figs 21-24, 104.

Figured in Pringle *et al.* 1994, Plate 116, Fig. 266ii (female).

Description

Head: black, frons black with two fine white lines laterally. Palpi with brown and white scales, third joint white-tipped. Antennae: black, ringed with white, club black with ochreous tip. Tarsi: black ringed with white. Thorax: black with ochreous scales and hairs.

Male. Forewing length: 16 mm (n=3). Antenna-wing ratio: 0.42 (n=3). Wings. Forewing rounded, costa and termen convex; hind wing rounded. Upper side. Forewing: yellow with narrow blackish-brown apical patch with obliquely sinuate inner edge; base of costa narrowly blackish-brown for a third of cell. Hind wing: yellow with hind wing underside markings discernable; cilia yellow. Underside. Forewing: yellow, with typical darker markings. Hind wing: dark brown markings forming a complete circle with a central spot at end of cell; similar to *T. puella*.

Female. Forewing length: 18 mm (n=4). Antenna-wing ratio: 0.41 (n=4). Female larger than male, wing shape more rounded; ground colour paler than male; markings similar to male but reduced at apex and along costa.

Genitalia, male (Fig. 104). Uncus bifid with narrowing pointed processes, angled centrally; valves oblong with long gently curved harpe, apices falcate, aedoeagus ventrally curved into a flattened 's', broad and distally blunt, not ventrally excised, with two long ventrally directed lobes.

Material Examined

Types. Holotype ♂, MOZAMBIQUE: Dondo. 5.viii.1957 (K.M. Pennington). Transvaal Museum Collection. Paratypes 8♂ 9♀: 1♂, as holotype; 4♂ 3♀ as holotype but 9.iv.1952, 16.ix.1953, 9.vii.1957, 9.viii.1957, 8.v.1962 and 18.ix.1952 (R. Badham), all in Transvaal Museum Collection; 2♀ Amatongas, 2.iv.1972, (I. Willem), in Henning Collection; 1♀ Dondo, 24.iv.1971 (D.M. Kroon), in Kroon Collection; 2♂ 1♀ as holotype, 4.v.1965, 1♂ 1♀ as holotype 9.v.1960, 1♀ as holotype, 4.ix.1962 (J.C.O. Chitty), in ABRI.

Distribution: Only known from Dondo and Amatongas Forests in Mozambique.

Habitat: Coastal forest.

Remarks: Differs from related species in the following features: Wings. Upper side. Apical patch smaller than in other species, closest to *T. zuluana*. Underside with complete circle of spots, closest to *T. puella*.

Genitalia, male. Uncus similar to *T. subpunctata* but with lobes more slender and angled; valve and harpe most similar to *T. zuluana* but with a longer harpe; aedoeagus most similar to *T. puella* but with ventral lobes longer and broader basally, tapering distally, lobes longer than in *T. zuluana*. Aedoeagus not narrow distally nor ventrally excised, with long sinuate and tapering ventral lobes as found in *T. puellaris*, which occurs in the same forests.

Etymology: Named for our late father William Henry (Bill) Henning.

Subgenus *Chrystina* subgen. n., Figs 2a, 2b, 17, 18, 75, 76.

Type species: *Durbania micra* Grose-Smith 1898, by present designation.

Description

Head small; eyes glabrous; labial palpi long, ascending, second segment not as stout as in *Teriomima*, third segment broad, white-tipped apex blunt; antennae short with distinct subcylindrical club shorter than *Teriomima*; thorax short and slender; male forelegs with unsegmented tarsi, clothed beneath with fine spines. Wings: costa and termen convex, wing shape more square than in *Teriomima*, apex acuminate; hind wing almost round. A patch of modified scales present in discocellular area of hind wing upper side, this patch is smaller and less conspicuous in type species than in *T. parva*. Forewing with 12 veins. Upper side: ground colour orange; apex dark brown tapering around margin to tornus; subapical bar, spots on costa and a spot present at end of cell. Underside: markings more like those of *Euthecta* than *Teriomima*. Forewing: orange-yellow, outer margin brownish-grey with submarginal black lunulate markings, subapical

band as on upper side but usually slightly more clear and extensive. Hind wing: reddish-brown; five transverse rows of greyish-orange lunulate markings outlined with fuscous; first row basal, second crossing the cell, third discal, fifth post-discal and sixth sub-marginal; there is also a series of small marginal dots.

Genitalia, male (Figs 17, 18, 75, 76). Uncus with two narrow distal projections, straighter than in *Teriomima*, more slender and sharply pointed, no narrowing of uncus beneath projections, apices tapering to blunt points and curved ventrally; tegumen long, vinculum wide; special processes absent; valves oblong without curved harpe, which is characteristic of *Teriomima*, apices strongly falcate and ventrally angled, aedeagus not as curved as in *Teriomima* and with a distinct terminal pointed projection; there is only a single ventrally directed lobe.

Remarks: Differs from subgenus *Teriomima* as follows: labial palpi blunt-tipped; antennal club shorter; modified patch of scales on hind wing upper side; underside markings as in *Euthecta*; valves without harpe, aedeagus with a distinct distal pointed projection and a single small ventral lobe only. Some of the characters and the genitalia of the subgenus are described and figured by Stempffer & Bennett 1953.

Etymology: Named for its golden colour.

KEY TO THE SPECIES OF THE GENUS *TERIOMIMA* (*CHRYSTINA*)

1. Upper side forewing subapical bar connected to apical patch, modified scales on hind wing distinct .. *parva*
- Upper side forewing subapical bar not connected to apical patch, modified scales on hind wing not distinct .. *micra*

Teriomima* (*Chrystina*) *micra (Grose-Smith 1898) **comb. n.**, Figs 2a, 2b, 17, 75.

Durbania micra Grose-Smith 1898, *Novitates Zoologicae* 5: 356.

Type locality: [Kenya]: "River Tana, British East Africa".

Figures: Adult figured in D'Abrera 1980, and Larsen 1991. Male genitalia figured in Stempffer & Bennett 1953.

Distribution: Kenya coast: Tana River; Shimba Hills; Rabai; Arabuko-Sokoke; Diani (Larsen 1991). North-eastern Tanzania: Usambara Mountains (Kielland 1990).

Habitat: Coastal and dry forest.

Habits: Flight of adults very feeble (Kielland 1990). Usually flies singly in forest, roosting at the ends of dry twigs, about a metre above the ground (Larsen 1991). Females oviposit among lichens on the bark of trees (Kielland 1990).

Genitalia, male (Figs 17, 75). Uncus with two straight and narrow, sharply pointed projections, tegumen long, vinculum wide; special processes absent; valves oblong, apices strongly falcate and ventrally angled, aedeagus not strongly curved, and with a distinct distal pointed projection; there is a single small ventrally directed lobe, ventral face deeply excised near distal end.

Teriomima (Chrystina) parva Hawker-Smith 1933, **comb. n.**, Figs 18, 76.

Teriomima parva Hawker-Smith 1933, *Stylops* 2: 6.

Type locality: [Kenya]: "Mombasa, Rabai".

Habitat: Coastal forests of Kenya inland to submontane forests of north-eastern Tanzania.

Two subspecies have been described.

Teriomima (Chrystina) parva parva Hawker-Smith 1933, **comb. n.**, Fig. 76.

Teriomima parva Hawker-Smith 1933, *Stylops* 2: 6.

Type locality: [Kenya]: "Mombasa, Rabai".

Figures: Adult figured in Stempffer & Bennett 1953, and D'Abbrera 1980. Male genitalia figured in Stempffer & Bennett 1953.

Distribution: Kenya: Coastal areas. North-eastern Tanzania: Usambara Mts, Amani; Nguru Mts; Uluguru Mts; Mikumi National Park (Kielland 1990). [Mozambique coast is a doubtful record.]

Habitat: Coastal to submontane forest. In eastern Tanzania at altitudes up to 1 200 m (Kielland 1990).

Habits: Settles on exposed twigs and shoots, moving the closed wings from side to side (Kielland 1990).

Genitalia, male (Fig. 76). Similar to *T. (C.) micra* but with valves less falcate and smoothly curved, lacking marked ventral angle on edge of valve of *T. (C.) micra*. Aedeagus broader distally.

Teriomima (Chrystina) parva beylissi subsp. n., Figs 18, 25-28.

Description

Head small; eyes glabrous; labial palpi long, ascending, second segment and third segment broad, blunt, apex white-tipped; antennae black, ringed with white, club black with ochreous tip. Tarsi: black ringed with white. Thorax: black with ochreous scales and hairs.

Male. Forewing length: 11 mm (n=1). Wings. Forewing rounded, costa and termen convex, apex acuminate; hind wing rounded. Upper side. Forewing

yellowish-orange with dark brown, 3 mm broad, patch at apex curving around and tapering down outer margin to the tornus, short subapical band just separated from apical patch, several black dots along costa and base, with dark scaling, black spot at end of cell. Hind wing yellowish-orange; very narrow dark brown marginal line; cilia greyish-white; central patch of modified scales large but not quite as large or as pale as nominate. Underside. Forewing pale orange-yellow, with typical darker markings. Hind wing reddish-brown; markings very faint and arranged as in nominate.

Female. Forewing length: 12 mm (n=2). Female larger than male, wing shape more rounded; ground colour paler than male; markings similar to male but reduced at apex and along forewing costa; outer marginal bands very narrow dark brown.

Genitalia, male (Fig 18). Similar to nominate subspecies but with valves slightly more falcate. Aedoeagus slightly narrower and longer distally.

Material Examined

Types. Holotype ♂, TANZANIA: Manga Forest Reserve, Muheza District, Tanga Region, 38° 47'E-5° 02'S. 23.x.1994 (V. Beyliss). J. Kielland Collection in ABRI. Paratypes 1♂ 2♀, as holotype. Holotype and paratypes in ABRI Collection, Kenya.

Distribution: Only known from the type locality.

Habitat: Submontane forest.

Remarks: Differs in the following features: Wings. Upper side with ground colour similar to *T. (C.) micra*, paler than nominate *T. (C.) parva*. Forewing apical patch broader than *T. (C.) micra* narrower than nominate, subapical band large like that of nominate subspecies but narrowly separated from apical patch; costa and cell spot like *T. (C.) micra*. Hind wing patch of modified scales not quite as large or as pale as nominate; marginal line very narrow. Underside similar to that of nominate subspecies but paler. Male genitalia similar to nominate *T. (C.) parva* but with valves slightly more falcate and aedoeagus slightly narrower and longer distally.

Etymology: Named for its discoverer V. Beyliss.

Euthecta Bennett 1954

Entomologist **87**: 170.

Type-species: *Euthecta cooksoni* Bennett 1954, *ibid.* 171, by original designation.

Head small; eyes glabrous; labial palpi long, second segment laterally compressed; antennae short with distinct subcylindrical club; thorax short and slender; male forelegs with unsegmented tarsi, clothed beneath with fine spines.

Wings. Forewing costa and termen convex. Hind wing oval. Forewing with 12 veins. Coloration of head, antennae, body and legs similar to *Teriomima*.

Male genitalia. Uncus conical, rather concave at the apex; no subunci or special processes; aedeagus very long, smoothly curved, the basal part enlarged, distally ending in a sharp point.

The characters and genitalia of the genus are described and figured in the original description and in Stempffer 1967. Also in Hemming 1967 and Eliot 1973.

KEY TO THE SPECIES OF THE GENUS *EUTHECTA*

- Underside markings clearly defined, base of aedeagus half as broad as base of valve .. *cooksoni* (Fig. 77)
- Underside markings not clearly defined, base of aedeagus as broad as base of valve .. *cordeiroi* (Fig. 20)

***Euthecta cooksoni* Bennett 1954**

Euthecta cooksoni Bennett 1954, *Entomologist* **87**: 171.

Type locality: [Mozambique]: "P.E.A., Dondo Forest, 25 m. from Beira".

Coastal forests of Mozambique and Tanzania. There are three subspecies.

***Euthecta cooksoni cooksoni* Bennett 1954, Figs 3a, 3b, 77.**

Euthecta cooksoni Bennett 1954, *Entomologist* **87**: 171.

Type locality: [Mozambique]: "P.E.A., Dondo Forest, 25 m. from Beira".

Figures: Adult figured in D'Abrera 1980, and Pringle *et al.* 1994. Male genitalia figured in Stempffer 1967.

Specimens seem to exhibit some variation with regard to the extent of the apical patch on the forewing.

Distribution: Mozambique: Dondo and Inhamitanga Forests.

Habitat: Coastal forest.

Habits: The flight of the adults is slow and weak. In Mozambique it flies almost at sea level. It flies high up in forest, circling slowly up, down and around the lichen-covered tree trunks. Adults favour particular tree trunks around which they circle, often two or three males together. Sometimes they move to adjacent tree trunks but generally return to the most favoured site.

Genitalia, male (Fig. 77). Uncus conical, rather concave at the apex; no subunci or special processes; aedeagus very long, evenly curved, the basal part enlarged, distally ending in a sharp point.

***Euthecta cooksoni subgrisea* subsp. n., Figs 33, 34.**

Description

Head small; eyes glabrous; labial palpi long, second segment laterally compressed. Thorax black with reddish-brown hairs.

Male. Forewing length: 11 - 13 mm (n=4). Wings. Forewing oval, costa and termen convex; hind wing oval. Upper side. Forewing yellowish-orange with a broad dark brown apical patch; costa yellowish-orange with dark brown marks; discocellular area without dark markings. Hind wing yellowish-orange; narrow dark brown marginal line, cilia orange-brown. Underside. Forewing: pale orange-yellow, costal and apical area broadly orange-brown with large grey markings outlined with dark grey, broader and straighter than nominate. Hind wing: reddish-brown; markings very broad, grey outlined with dark grey, arranged as in nominate subspecies.

Female. Forewing length: 13 mm (n=1). Female larger than male, wing shape more rounded; ground colour slightly paler than male; markings similar to male but greatly reduced at apex and along forewing costa; outer marginal bands very narrow dark brown.

Genitalia, male. As in nominate subspecies.

Material Examined

Types. Holotype ♂, TANZANIA: Rondo Plateau, 2.ii.2002 (T.C.E.Congdon). Paratypes 34♂ 30♀, as holotype but between 2.ii.2002 and 5.iii.2002 (T.C.E. Congdon, I. Bampton, P. Walwanda, M. Hassan). Holotype and paratypes in ABRI Collection, Kenya; paratypes in Henning Collection.

Distribution: **South-eastern Tanzania: Rondo Plateau (750 to 870 m), west of Lindi (Kielland 1990).**

Habitat: Dry montane forest.

Habits: Adults fly slowly around forest edges and in clearings, settling on twigs or branches. Females have been noted settling on tree trunks (Kielland 1990).

Remarks: The upper side differs from nominate *E. cooksoni* in the generally broader apical patch on the forewing, and the brighter and darker orange ground colour. The forewing underside has more extensive and straighter grey markings and darker orange-brown apical and costal areas than nominate *E. cooksoni*. The hind wing is darker, with much larger grey markings; discal line of markings much broader and more confluent than in other subspecies.

Etymology: Named for its grey underside markings.

***Euthecta cooksoni marginata* subsp. n.,** Figs 35, 36.

Description

Head small; eyes glabrous; labial palpi long, second segment laterally compressed. Thorax black with reddish-brown hairs.

Male. Forewing length: 11 mm (n=1). Wings. Forewing oval, costa and termen convex; hind wing oval. Upper side. Forewing orange with a broad blackish-brown apical patch; costa orange with blackish-brown marks; discocellular area with dark markings. Hind wing orange; broad blackish-brown marginal line, broadest medially, cilia orange-brown. Underside. Forewing: orange-yellow, costal and apical area broadly orange-brown, with large dark grey markings strongly outlined with dark grey. Hind wing: reddish-brown; markings dark brownish-grey outlined with dark grey, arranged as in nominate subspecies.

Female. Forewing length: 13 mm (n=1). Female larger than male, wing shape more rounded; ground colour slightly paler than male; markings similar to male but reduced at apex and along forewing costa.

Genitalia, male. As in nominate subspecies.

Material Examined

Types. Holotype ♂, TANZANIA: Kitchi Hills, iv.2003, (T.C.E. Congdon, I. Bampton, P. Walwanda, M. Hassan). Paratypes: 1♂ 6♀, as holotype. Holotype and paratypes in ABRI Collection, Kenya.

Distribution: Tanzania: Kitchi Hills, south of Mchukwi, 40 km from the coast.

Habitat: Dry montane forest.

Habits: Adults fly slowly around forest edges and in clearings, settling on twigs or branches.

Remarks: The upper side differs from nominate *E. cooksoni* in the broader and darker apical patch on the forewing, which extends to the tornus, and the deeper and brighter orange ground colour. The hind wing has a broad irregular black outer marginal patch, broadest medially. The forewing underside has much darker and more clearly defined markings than in nominate *E. cooksoni*. The hind wing is darker with much darker, more strongly margined, markings.

Etymology: Named for the broad dark marginal markings on the upper side.

Euthecta cordeiroi sp. n., Figs 20, 29-32.

Description

Head small; eyes glabrous; labial palpi long, second segment laterally compressed. Thorax black with reddish-brown hairs.

Male. Forewing length: 11-12.5 mm (n=2). Antenna-wing ratio: 0.40 (n=1). Wings. Forewing oval somewhat elongated apically, costa and termen convex; hind wing oval. Upper side. Forewing yellowish-orange with dark brown, 3 mm broad, apical patch; termen with reddish-brown markings; costa dark brownish-

orange with dark brown marks; discocellular area without dark markings. Hind wing yellowish-orange; narrow brownish-orange marginal shading, cilia reddish-brown. Underside. Forewing: pale orange-yellow, costa and apex broadly reddish-brown with faint darker markings. Hind wing: reddish-brown; markings very faint and arranged as in nominate subspecies; small dark patch on inner margin, small dark brown discal markings in a line.

Female. Forewing length: 12 mm (n=2). Female larger than male, wing shape more rounded; ground colour slightly paler than male; markings similar to male but reduced at apex and along forewing costa; outer marginal bands very narrow dark brown.

Genitalia, male (Fig. 20). Uncus conical, very narrow; no subunci or special processes; aedeagus very long, strongly curved, the basal part greatly enlarged, distally ending in a sharp point.

Material Examined

Types. Holotype ♂, TANZANIA: Amani, East Usambara, v.2001 (T.C.E. Congdon, I. Bampton). Paratypes. 1♂ 2♀: 1♂ Mtai Forest, East Usambara, 1060 m, 3.viii.1990 (N. Cordeiro), Kielland Collection, in ABRI. Kielland Genitalia No. 4211. 1♀, Kazimzumbawe, Frontier, 1990 (N. Cordeiro); 1♀ Amani, East Usambara, iii 2001 (T.C.E. Congdon, I. Bampton, P. Walwanda, S.C. Collins), ABRI, Kenya.

Distribution: Eastern Usambara mountain range, north-eastern Tanzania.

Habitat: Recorded in gallery forest above 1000 m.

Habits: Adults are seen flying commonly in the canopy but only a few specimens were taken for study.

Remarks: The upper side differs from that of *E. cooksoni* in the straighter inner margin of the apical patch and the reddish-brown marginal markings on the forewing, and the duller and darker orange ground colour. The forewing underside has a more extensive and darker reddish-brown apical and costal area, with only faint indications of the darker markings of *E. cooksoni*. The hind wing is darker with fainter markings; discal line of markings darker and straighter than in other subspecies. There is a prominent dark grey mark midway along the inner margin. The genitalia differ from those of *E. cooksoni* in that the base of the aedeagus is twice as broad, and the long narrow distal portion is broader basally and strongly curved. The valves are broader and distinctly rounded dorsally and ventrally.

Etymology: Named for its discoverer N. Cordeiro.

Genus *Baliochila* Stempffer & Bennett 1953

Bulletin of the British Museum (Natural History) (Entomology) **3**: 85.

Type-species: *Liptena aslanga* Trimen 1873, by original designation.

Head small; eyes glabrous; labial palpi long, second segment laterally compressed; antennae short, with a distinct subcylindrical club; thorax short and slender; male forelegs with unsegmented tarsi, clothed beneath with fine spines. Forewing costa and termen convex; hind wing oval. Forewing with 12 veins (Stempffer 1967). Coloration of head, antennae, body and legs similar to *Teriomima*.

Redescription of type species:

Male. Forewing length: 16.0-21.0 mm (n=12); antenna-wing ratio: 0.46 (n=12). Wings. Forewing rounded, costa and termen convex; hind wing rounded. Upper side. Forewing orange-yellow with dark brown markings; terminal border broad (more than 3 mm) and of even width throughout; apex broad, extending along costa, interrupted by yellow spots; discocellular area with subcostal patch extending down as far as area M_3 ; subcostal cellular patch and spots in middle and at base of cell; cilia dark brown, chequered with greyish-white. Hind wing: orange-yellow; a narrow dark brown terminal band expanded at apex into a triangular patch, cilia dark brown chequered with greyish-white. Underside. Forewing: orange-yellow, outer margin brownish-grey with markings as on upper side but usually slightly more clear and extensive. Hind wing: reddish-brown; six transverse rows of orange-yellow spots outlined with fuscous; first row basal, second crossing cell, third medial, fourth discal, fifth post-discal and sixth consisting of a series of triangular sub-marginal spots.

Female. Female larger than male, wing shape more rounded; ground colour slightly paler than in male; markings similar to male but reduced along forewing costa and terminal bands narrower.

Genitalia, male. Characteristic of genus is a pair of special processes; base of each being strongly attached to dorsal side of anellus on its inner margin and less strongly, with a half-membranous connection, to tegumen, on its outer margin. Processes rest more or less parallel with longitudinal axis of abdomen, midway between uncus and aedoeagus. Structure of uncus and special processes variable. Special processes vary from a pair of small sclerotized patches with spines to long 'feather-like' ornamentation. In type species uncus is bifid with two narrow distal projections, apices slightly expanded and curved ventrally, with numerous strong spines; at base of each projection a small, laterally projecting apophysis; tegumen wide; special processes short, strongly curved, apices broadened, bearing numerous strong spines; valves oblong, apices falcate, distal end with a sharp spine, aedoeagus ventrally curved, pointed distal projection dorsally and deeply excised ventrally.

The characters and genitalia of the genus are described and figured by Stempffer & Bennett 1953, Stempffer 1967, Hemming 1967, and Eliot 1973.

Early stages (type species):

Clark & Dickson 1971: 244 (as *Baliochila aslauga*; from south of Umhlanga Rocks, KwaZulu-Natal).

Larval food:

Algae (= Tree lichens (Lichenes)), recorded by Clark & Dickson 1971, from south of Umhlanga Rocks, KwaZulu-Natal. Algae (Cyanophyta) on trees (Pringle, *et al.* 1994).

KEY TO THE SPECIES GROUPS OF THE GENUS *BALIOCHILA*

1. Male genitalia with special processes; anellus lobes absent .. 2
- Male genitalia without special processes; anellus lobes present .. *singularis* group
2. Uncus strongly bifid .. 3
- Uncus not strongly bifid .. 5
3. Uncus bipectinate, bifid from stalk .. *minima* group
- Uncus bifid from broad base .. 4
4. Uncus arms with projections angled .. *congdoni* group
- Uncus arms with projections not angled .. *aslanga* group
5. Uncus quadrate with dorsal points .. *stygia* group
- Uncus not quadrate, projected into narrow dorsal lobe .. 6
6. Uncus dorsal lobe strongly flattened, hind wing underside with unmarked centre .. *woodi* group
- Uncus dorsal lobe not strongly flattened, hind wing underside with centre marked .. *nyasae* group

KEY TO THE SPECIES OF THE GENUS *BALIOCHILA*

1. Hind wing underside with median clear patch .. 2
- Hind wing underside without median clear patch .. 4
2. Upper side orange area occupying almost half of forewing and two-thirds of hind wing .. *woodi*

-
- Upper side orange area less than half of forewing and two-thirds of hind wing .. 3
 - 3. Upper side orange area restricted to a small spot on forewing and less than half of hind wing .. *pringlei*
 - Upper side orange restricted to patch on forewing and about half of hind wing .. *mwanihanae*
 - 4. Small species, forewing length under 12 mm .. 5
 - Not small species, forewing length over 12 mm .. 9
 - 5. Forewing upper side largely black .. 6
 - Forewing upper side not largely black .. 8
 - 6. Uncus bipectinate .. *latimarginata* (Fig. 85)
 - Uncus not bipectinate .. 7
 - 7. Uncus quadrate, a distinct orange patch on forewing upper side .. *stygia* (Fig. 94)
 - Uncus conical, without distinct orange patch on forewing upper side .. *fusca* (Fig. 111)
 - 8. Upper side forewing costa narrowly black .. *amanica*
 - Upper side forewing costa not narrowly black .. *minima*
 - 9. Male genitalia with special processes; anellus lobes absent .. 10
 - Male genitalia without special processes; anellus lobes present .. *singularis* (Fig. 97)
 - 10. Forewing terminal band at cubitals less than 2 mm wide .. 11
 - Forewing terminal band more than 2 mm wide .. 14
 - 11. Forewing discocellular patch broad and rounded, uncus not strongly bifid .. *fragilis* (Fig. 92)
 - Discocellular patch not broad and rounded, uncus strongly bifid .. 12
 - 12. Forewing not acute, termen not straight, discocellular patch small, uncus bipectinate .. 13
 - Forewing acute, termen straight, discocellular patch not small, uncus bilobed .. 14

13. Uncus bipectinate on narrow stalk, apices of uncus expanded and rounded .. *pseudofragilis* (Fig. 93)

Uncus not bipectinate on narrow stalk, apices of uncus narrowing and bluntly pointed .. *lipara* (Fig. 86)

14. Underside markings large and confluent, costal and discocellular patch fragmented .. *lequeuxi*

- Underside markings not large or confluent, costal and discocellular patch not fragmented .. *confusa*

15. Discocellular black patch long and broad .. 16

- Discocellular black patch not long and broad .. 20

16. Ground colour dark brownish-orange .. *dubiosa*

- Ground colour not dark .. 17

17. Uncus arms broad .. *hildegarda* (Fig. 81)

- Uncus arms narrow .. 18

18. Uncus without triangular apophyses .. *neavei* (Fig. 80)

- Uncus with triangular apophyses .. 19

19. Uncus arms shorter than base .. *aslanga* (Fig. 78)

- Uncus arms longer than base .. *barnesi* (Fig. 79)

20. Ground colour pale and translucent .. 21

- Ground colour not pale and translucent .. 23

21. Ground colour ivory yellow .. *warrengashi*

- Ground colour not ivory yellow.. 22

22. Hind wing underside submarginal band of spots prominent .. *nguru*

- Hind wing underside submarginal band of spots not prominent .. *congdoni*

23. Hind wing upper side largely black .. 24

- Hind wing upper side not largely black .. 25

24. Upper side ground colour orange, valve with large ventral tooth .. *megadentata* (Fig. 108)

- Upper side ground colour not orange, valve without large ventral tooth .. *abri* (Fig. 110)

25. Upper side ground colour lemon yellow .. *citrina*
- Upper side ground colour not lemon yellow .. 26

26. Ground colour deep orange, hind wing dark margin not curving around apex .. *collinsi*
- Ground colour not deep orange, hind wing dark margin curving around apex .. *nyasae*

ASLANGA SPECIES GROUP

Baliochila aslanga (Trimen 1873), Figs 4a, 4b, 78.

Liptena aslanga Trimen 1873, *Transactions of the Entomological Society of London* **1873**: 117.

Type locality: South Africa: "Pinetown, near D'Urban, Port Natal".

Figures: Adult figured in Aurivillius 1925, D'Abbrera 1980, and Pringle *et al.* 1994. Male genitalia figured in Stempffer & Bennett 1953.

Distribution: South Africa: North coast of KwaZulu-Natal. Mpumalanga: Malelane. Swaziland: Duke *et al.* 1999. Mozambique: In the south to Delagoa Bay. [Incorrectly recorded from Zimbabwe, "reaching the Victoria Falls (Zimbabwe)" (Ackery *et al.* 1995)].

Habitat: Coastal forest and adjacent woodland.

Habits: Adults flutter around forest edges or in the canopy. Frequently found in woodlands where adults frequent specific trees. Adults are sometimes found gregariously around certain trees in the company of *Baliochila lipara* and *Cnodontes penningtoni* in northern KwaZulu-Natal. Part of the life history was recorded by Clark & Dickson 1971: 244.

Genitalia, male (Fig. 78). Uncus with two narrow distal projections, apices slightly expanded and curved ventrally, with numerous strong spines; at base of each projection a small, laterally projecting apophysis; tegumen wide; special processes short and strongly curved, apices broadened, bearing numerous strong spines; valves oblong, apices falcate, distal end with sharp spine, aedeagus ventrally curved, without pointed distal projection dorsally, and deeply excised ventrally.

Baliochila barnesi Stempffer & Bennett 1953, Fig. 79.

Baliochila barnesi Stempffer & Bennett 1953, *Bulletin of the British Museum (Natural History)* (Entomology) **3**: 86.

Type locality: [Zimbabwe]: "Mineni Valley, Manica, S.E. Trop. Afr."

Figures: Adult figured in Stempffer & Bennett 1953, D'Abbrera 1980, and Pringle *et al.* 1994. Male genitalia figured in Stempffer & Bennett 1953.

Distribution: Zimbabwe: Eastern border – Mutare; Mount Selinda; Burma Valley; Pungwe Bridge. Mozambique: Dondo Forest; Buzi River; Amatongas; Xiluvo; Savane Forest.

Habitat: Dry montane forest and wooded areas.

Habits: Adults fly weakly around forest edges or in the canopy.

Genitalia, male (Fig. 79). Uncus with two narrow distal projections, longer and narrower than in *B. aslanga*, apices slightly expanded and curved ventrally, with numerous strong spines; at base of each projection a small, laterally projecting apophysis; tegumen wide; special processes short and strongly curved as in *B. aslanga*, apices broadened, bearing numerous strong spines; valves oblong, apices falcate, distal end with a sharp spine, aedeagus ventrally curved, deeply excised ventrally.

Baliochila neavei Stempffer & Bennett 1953, Fig. 80.

Baliochila neavei Stempffer & Bennett 1953, *Bulletin of the British Museum (Natural History)* (Entomology) **3**: 88.

Type locality: [Malawi]: “Mlanje, Nyasaland”.

Figures: Adult figured in Stempffer & Bennett 1953, Gifford 1965, and D’Aberera 1980. [Incorrectly figured in Berger 1981 (= *B. hildegarda*), Pringle *et al.* 1994 (= *B. barnesi*)]. Male genitalia figured in Stempffer & Bennett 1953.

Distribution: Southern Malawi: Mlanje; Luchenza; Shire Highlands (Gifford 1965); Blantyre. Northern Mozambique: Mandala; Ruo Valley; Monapo; Tendo du Sunque - Gorongosa District. [Probably incorrectly recorded from Tanzania, Burundi and the Democratic Republic of Congo (Haut-Shaba)].

Habitat: Montane forest.

Habits: Adults fly weakly, around forest fringes.

Genitalia, male (Fig. 80). Uncus with two slender curved distal projections, longer than in *B. aslanga*, but shorter and broader than in *B. barnesi*, apices slightly expanded and bearing numerous strong spines; laterally projecting apophysis present in *B. aslanga* and *B. barnesi* lacking; tegumen wide; special processes shorter than in *B. aslanga* but not as short as in *B. barnesi*; valves oblong, apices falcate, distal end with a sharp spine, aedeagus long and ventrally curved, pointed distal projections dorsally, and deeply incised ventrally.

Baliochila hildegarda (Kirby 1887), Figs 20, 81.

Teriomima (?) *hildegarda* Kirby 1887, *Annals and Magazine of Natural History* (5) **19**: 367.

Type locality: “Ashanti” (*patria falsa*).

= *freya* Grose-Smith & Kirby 1894 in Grose-Smith & Kirby 1892-7 (as sp. of *Teriomima*), *Rhopalocera exotica*, *being illustrations of new, rare and unfigured*

species of butterflies 2: 115. London. [Tanzania]: “Lindi, German East Africa”. Synonymised by Aurivillius 1898.

Figures: Adult figured in Aurivillius 1925, Stempffer & Bennett 1953, D’Abrera 1980, Larsen 1991, and Heath *et al.* 2002. Male genitalia figured in Stempffer & Bennett 1953, and Larsen 1991.

Distribution: Kenya: Mombasa; Arabuko-Sokoke Forest; Shimba Hills; Chyulu Hills; Nairobi (Larsen 1991). Tanzania: Mpanda; Kigoma; Tukuya; Rondo Plateau; Usambara Mts; Madibira Hills; Kiboriani Mts; Njoge Mts (Kielland 1990); Mixumi; Kefu; Zanzibar.

Rwanda: Karama; Bugesera. Malawi: Mlanje; Shire Highlands; Zomba; Dedza; Bua River; Karonga (Gifford 1965); Dzalanyama; Mukwadzi; Namitembo Stream; Maiwale; Chisasira Falls; Mzuzu; Nkata Bay. Northern Zambia: Widespread but local. Mwinilunga; Mumbezhi; Mporokosa; Ndola; Chingola; Mufulira; Makatu Mountains (Heath *et al.* 2002). [Zimbabwe (Ackery *et al.* 1995): No known records.]. Democratic Republic of Congo: Shaba; Kibomboma (Kielland 1994).

Habitat: Woodland and forest margins, from sea level to 1 600 m (Kielland 1990). In deciduous woodland with high rainfall, usually in long-grass savanna (Gifford 1965).

Habits: Regarded as common and widespread. Often several individuals are found together clustered on a grass stem or dry twig (Kielland 1990). Roosting specimens frequently open and close their wings in a slow, deliberate manner (Larsen 1991). At Rondo they were seen roosting on *Albizia* saplings on the edge of a pine plantation (Bampton, pers. comm.).

Genitalia, male (Fig. 81). Uncus with two broad projections, apices may be slightly expanded or curved ventrally, with numerous spines; tegumen wide; special processes short, bearing numerous strong spines; valves oblong, apices falcate, distal end with a sharp spine, aedeagus ventrally curved, pointed distal projection absent, deeply excised ventrally.

Note. *B. hildegarda* extends over a large area and is often the most common species. It is also very variable and this has led to some confusion over identification in the past.

Baliochila dubiosa Stempffer & Bennett 1953, Fig. 82.

Baliochila dubiosa Stempffer & Bennett 1953, *Bulletin of the British Museum (Natural History)* (Entomology) 3: 90.

Type locality: [Kenya]: “Brit. E. Afr., Uchweni Forest, nr. Witu”.

Figures: Adult figured in Stempffer & Bennett 1953, D’Abrera 1980, and Larsen 1991. Male genitalia figured in Stempffer & Bennett 1953, and Larsen 1991.

Distribution: Eastern Kenya: Uchweni Forest near Witu; Nairobi; Moyo; Watamu; Witu; Kilifi; Meru (Larsen 1991). North-eastern Tanzania: Pugu Hills;

Mikumi; Turiani Forest; Kimboza Forest (Kielland 1990). [Malawi: Kielland 1990 gives Malawi; this is probably incorrect.]

Habitat: Dry forest and deciduous woodland; lowland forest (Kielland 1990).

Habits: Adults often settle on bare shoots and twigs (Kielland 1990).

Genitalia, male (Fig. 82). Uncus with two broad distal projections, apices of projections deeply cleft with numerous strong spines; at base of each projection a small, laterally projecting apophysis; tegumen wide; special processes strongly curved, similar to *B. hildegarda*; apices broadened, bearing numerous strong spines; valves oblong, apices falcate, distal end with a sharp spine; aedoeagus ventrally curved and deeply excised ventrally.

MINIMA SPECIES GROUP

Baliochila minima (Hawker-Smith 1933), Figs 5a, 5b, 83.

Teriomima minima Hawker-Smith 1933, *Stylops* 2: 6.

Type locality: [Kenya]: “Uchweni Forest, Witu”.

Figures: Adult figured in Stempffer & Bennett 1953, D’Abrera 1980, and Larsen 1991. Male genitalia figured in Stempffer & Bennett 1953, and Larsen 1991.

Distribution: Kenya: Coastal areas.

Habitat: Coastal forest.

Habits: Occurs in localized populations. The flight is weak (Larsen 1991).

Genitalia, male (Fig. 83). Uncus forked, arising from an oval base, prongs slender and sinuate, base of prong hemispherical; tegumen rather small; special processes long and slender, clothed with stiff bristles and extending to end of prongs; vinculum wide; valves oblong with falcate apices; aedoeagus short and thick, cleft distally.

Baliochila amanica Stempffer & Bennett 1953, Fig. 84.

Baliochila minima amanica Stempffer & Bennett 1953, *Bulletin of the British Museum (Natural History)* (Entomology) 3: 97. Raised to specific status by D’Abrera 1980.

Type locality: [Tanzania]: “Tanganyika Terr., Amani”.

Figures: Adult figured in Stempffer & Bennett 1953, D’Abrera 1980, and Larsen 1991. Male genitalia figured in Stempffer & Bennett 1953, and Larsen 1991.

Distribution: South-eastern Kenya: Arabuko-Sokoce Forest; Mt Sagala; Teita Hills (Mbololo); Kasigau (Larsen 1991). North-eastern Tanzania: Magombera Forest Reserve in Kilombero Valley; Pugu Hills; Nguru Mts; Usambara Mts (Kielland 1990); Uluguru Mts.

Habitat: Lowland forest, from sea level to 1 100 m (Kielland 1990).

Genitalia, male (Fig. 84). Uncus forked, arising from an oval base, prongs slender and sinuate but not widely divergent, base of prong narrow; tegumen

rather small; special processes short and thick, clothed with stiff bristles and not extending to end of prongs; vinculum wide; valves oblong with falcate apices; aedeagus short and stout, cleft distally.

Baliochila latimarginata (Hawker-Smith 1933)

Teriomima minima latimarginata Hawker-Smith 1933, *Stylops* 2: 7. Raised to specific status by D'Abbrera 1980.

Type locality: [Kenya]: "Rabai, Mombasa".

Coastal forest along the Kenya and Tanzania coast. There are two subspecies.

Baliochila latimarginata latimarginata (Hawker-Smith 1933), Fig. 85.

Teriomima minima latimarginata Hawker-Smith 1933, *Stylops* 2: 7.

Type locality: [Kenya]: "Rabai, Mombasa".

Figures: Adult figured in Stempffer & Bennett 1953, D'Abbrera 1980, and Larsen 1991. Male genitalia figured in Stempffer & Bennett 1953, and Larsen 1991.

Distribution: Kenya coast: Rabai; Jilore; Shimba Hills; Kilifi (Larsen 1991). North-eastern Tanzania: Kitonga Gorge; Magombera Forest; Kimboza Forest; Pugu Hills; Kiono Forest near Sadani; East Usambara Mountains (Kielland 1990). Sympatric with the very closely related *minima* (Larsen 1991).

Habitat: Lowland forests, from near sea level to 800 m (Kielland 1990).

Habits: Nothing published.

Genitalia, male (Fig. 85). Uncus forked, arising from an oval base, prongs slender and sinuate and widely divergent, base of prong oval; tegumen rather small; special processes long and slender, arising from a broad base, clothed with stiff bristles and extending well beyond end of prongs; vinculum wide; valves oblong with falcate apices; aedeagus short and thick, cleft distally.

***Baliochila latimarginata rondoensis* subsp. n.**, Figs 37-40, 105.

Description

Head: black; frons black with two fine white lines laterally; labial palpi with brown and white scales, third joint white-tipped. Antennae: black, ringed with white; club black with ochreous tip. Tarsi: black, ringed with white. Thorax: black with ochreous scales and hairs.

Male. Forewing length: 12.0-13.0 mm (n=2). Antenna-wing ratio: 0.42 (n=2).

Wings. Forewing rounded, costa and termen convex; hind wing rounded. Upper side. Forewing blackish-brown with orange patch on inner margin; cilia dark brown with small greyish-white flecks. Hind wing: basal half orange, distal half blackish-brown, dark scaling at base; cilia dark brown with greyish-white flecks.

Underside. Similar to *B. l. latimarginata*.

Female. Forewing length: 11.0-14.0 mm (n=2). Antenna-wing ratio: 0.40 (n=2). Female larger than male, wings more rounded; ground colour slightly paler than in male; markings similar to male but reduced along forewing costa and marginal bands narrower.

Genitalia, male (Fig. 105). Uncus forked, arising from oval base, prongs slender and sinuate and widely divergent; tegumen rather small; special processes long and very slender, arising from narrow base, clothed with stiff bristles and extending just beyond end of prongs; vinculum wide; valves oblong with falcate apices; aedoeagus short and stout, cleft distally.

Material Examined

Types. Holotype ♂, TANZANIA: Rondo Plateau, 22.ii.2002 (T.C.E.Congdon). Paratypes 44♂ 9♀, as holotype but between 5.ii.2002 and 2.iii.2002 (T.C.E. Congdon, I. Bampton, P. Walwanda, M. Hassan). Holotype and paratypes in ABRI, Kenya; paratype in Henning Collection.

Distribution: Rondo Plateau, south-eastern Tanzania.

Habitat: Dry montane forest.

Habits: Adults fly slowly around forest edges and in clearings, settling on twigs or branches.

Remarks: Differs from *B. l. latimarginata* in that the orange areas of the upper side are smaller. The special processes on the male genitalia are slightly shorter and narrower.

Baliochila lipara Stempffer & Bennett 1953, Fig. 86.

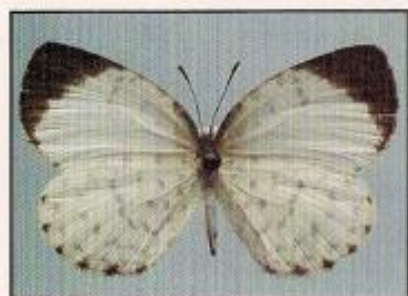
Baliochila lipara Stempffer & Bennett 1953, *Bulletin of the British Museum (Natural History)* (Entomology) **3**: 99.

Type locality: [Malawi]: "Nyasaland, Mlanje".

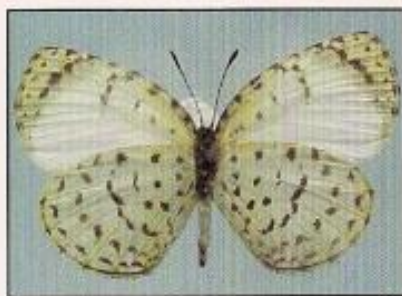
Figures: Adult figured in Stempffer & Bennet 1953, Gifford 1965, D'Abbrera 1980, Larsen 1991, and Pringle *et al.* 1994. Male genitalia figured in Stempffer & Bennett 1953, and Larsen 1991.

Distribution: South-eastern Kenya: Shimba Hills; Kibwezi; Kasigau; Mt Sagala; Mombasa; Rabai (Larsen 1991). Eastern Tanzania: Mikumi National Park; Morogoro; Mukuyu in Kigoma (single record) (Kielland 1990). Southern Malawi: Mlanje; Chilwa Plain; Zomba (Gifford 1965). Mozambique: Garuso. Zimbabwe: Eastern border; Cross Kopje near Mapembi; Mutare. South Africa: KwaZulu-Natal - Makatini Flats; Tembe; Mangusi.

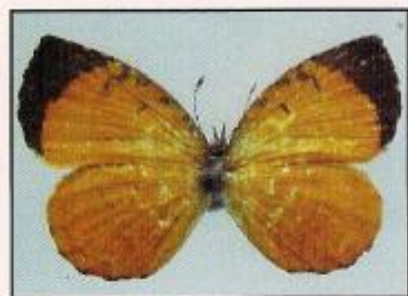
Habitat: Deciduous woodland (savanna), from 500 to 1 000 m (Kielland 1990). High rainfall deciduous woodland (Gifford 1965). Further south in South Africa it can occur below 50 m.



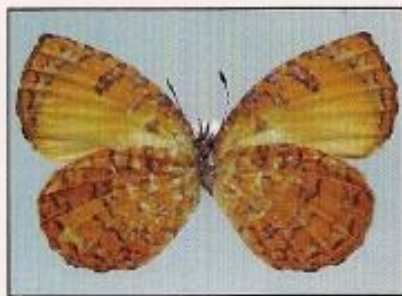
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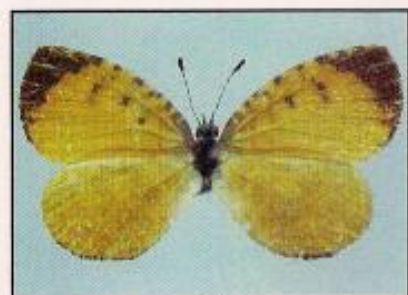
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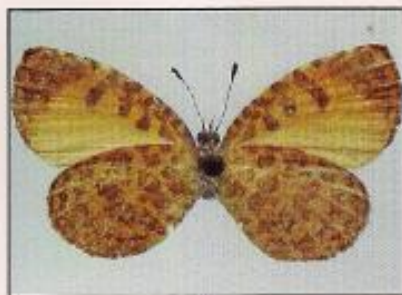
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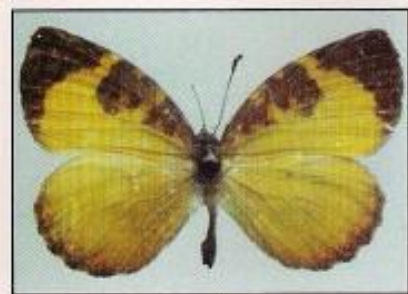
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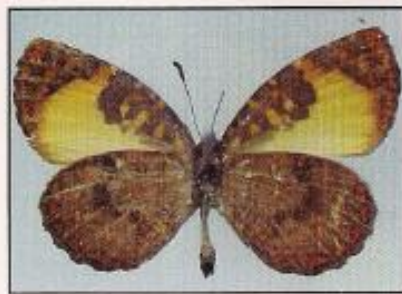
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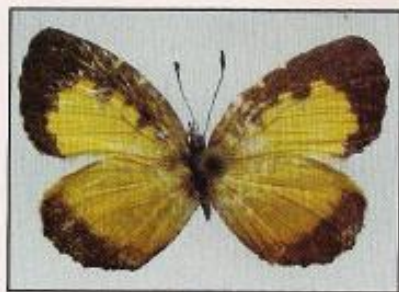
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4a



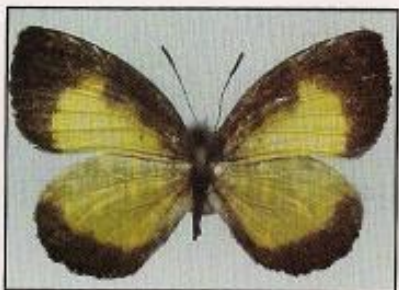
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5a



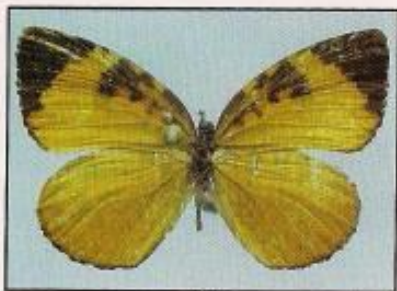
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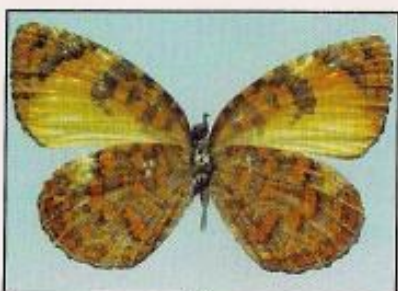
6a



6b



7a



7b



8a



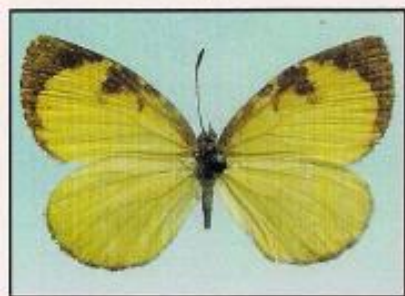
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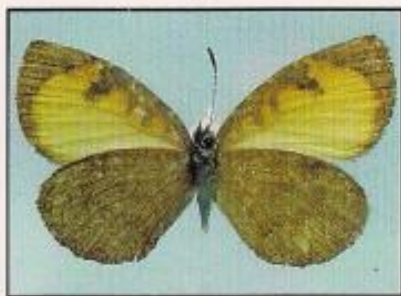
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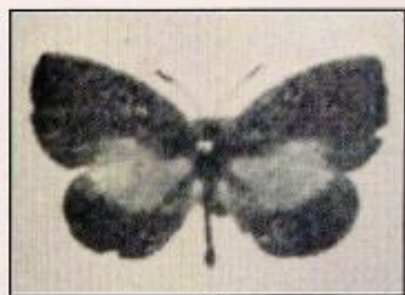
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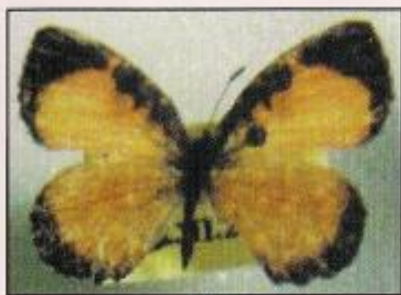
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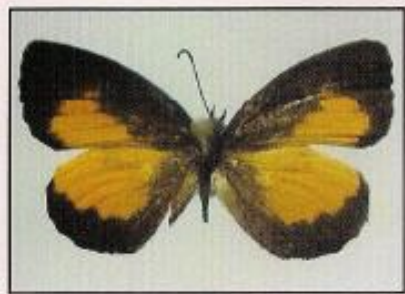
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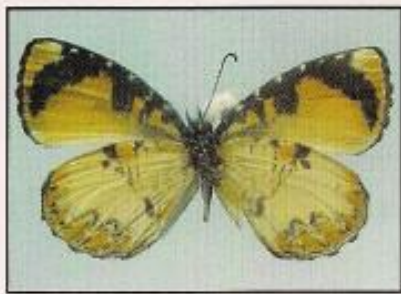
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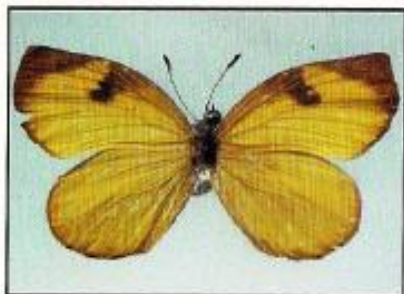
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13a



13b



14a



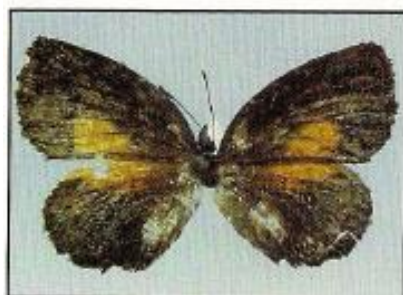
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15a



15b



16a



16b



17



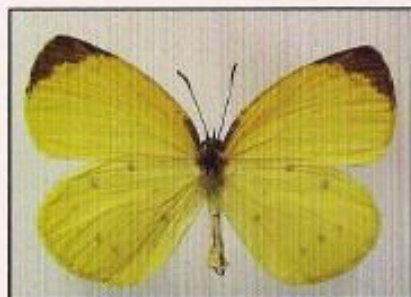
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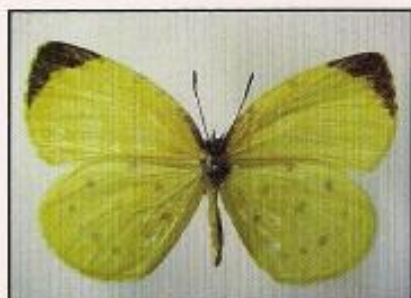
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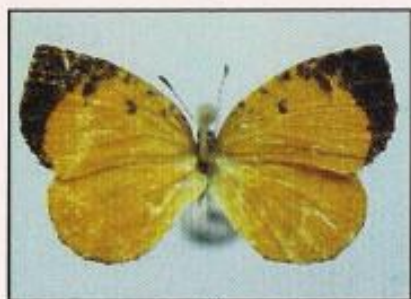
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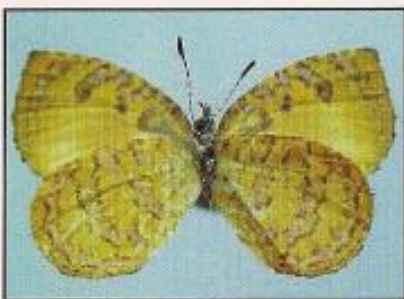
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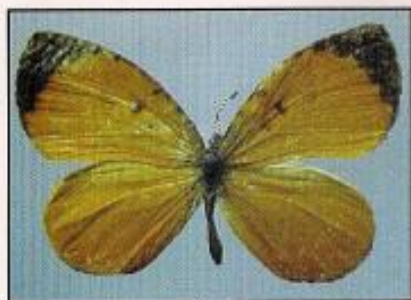
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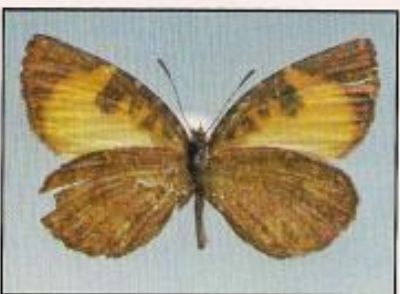
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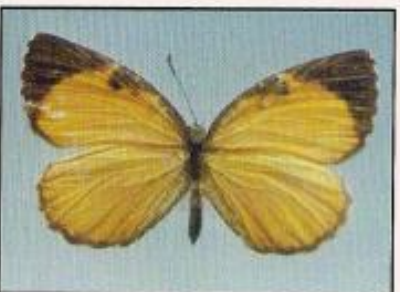
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43



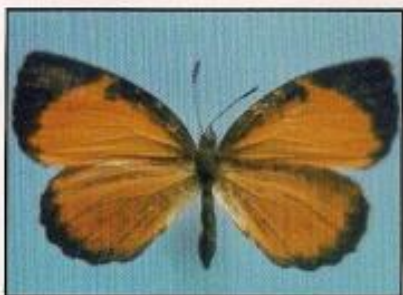
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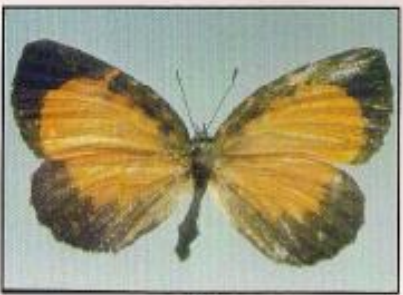
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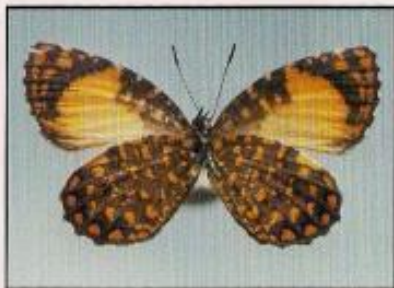
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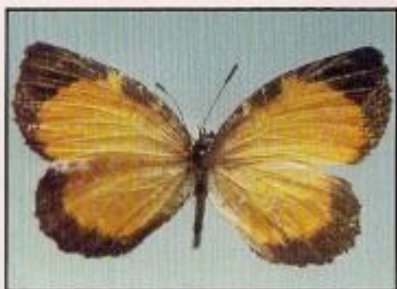
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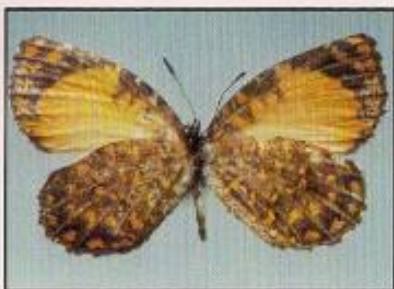
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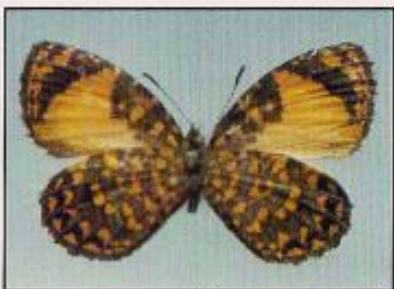
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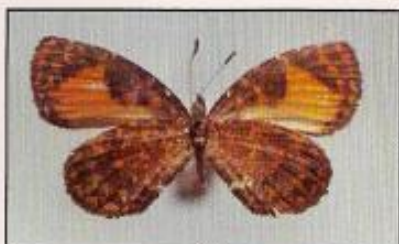
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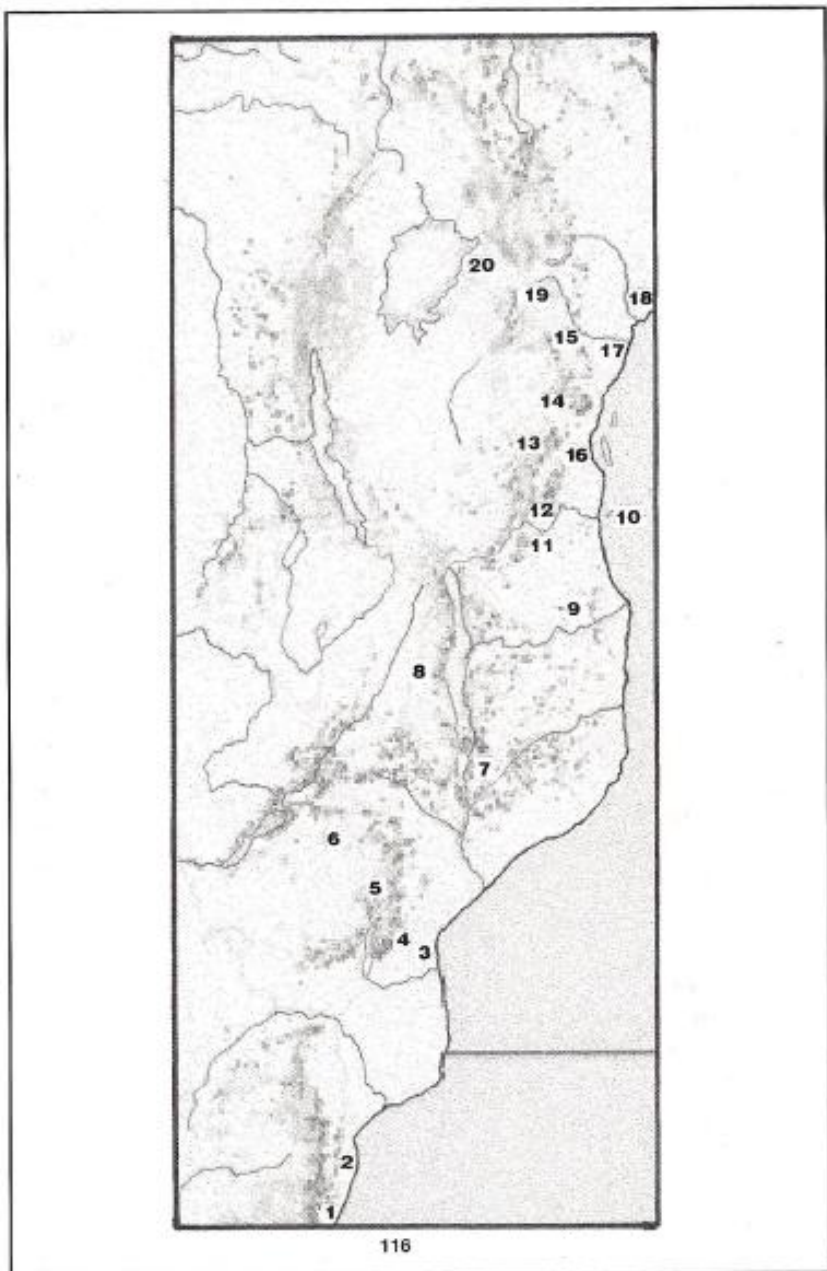
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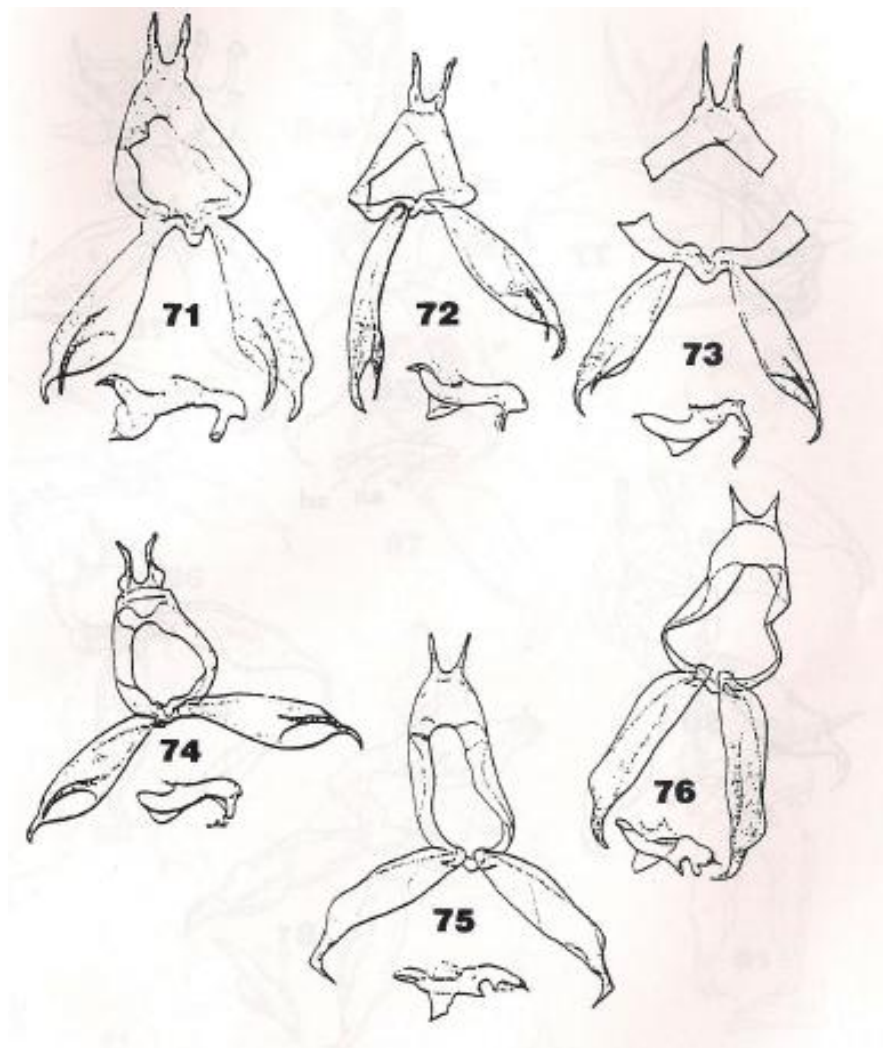


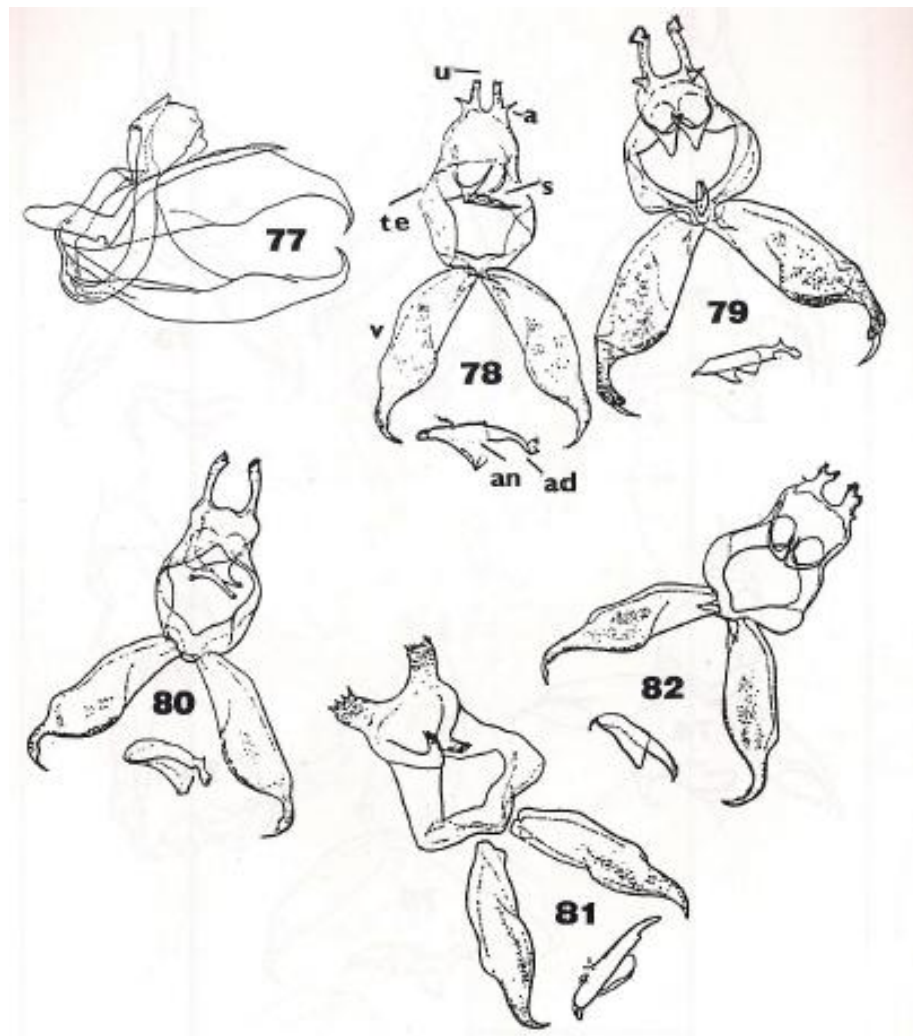
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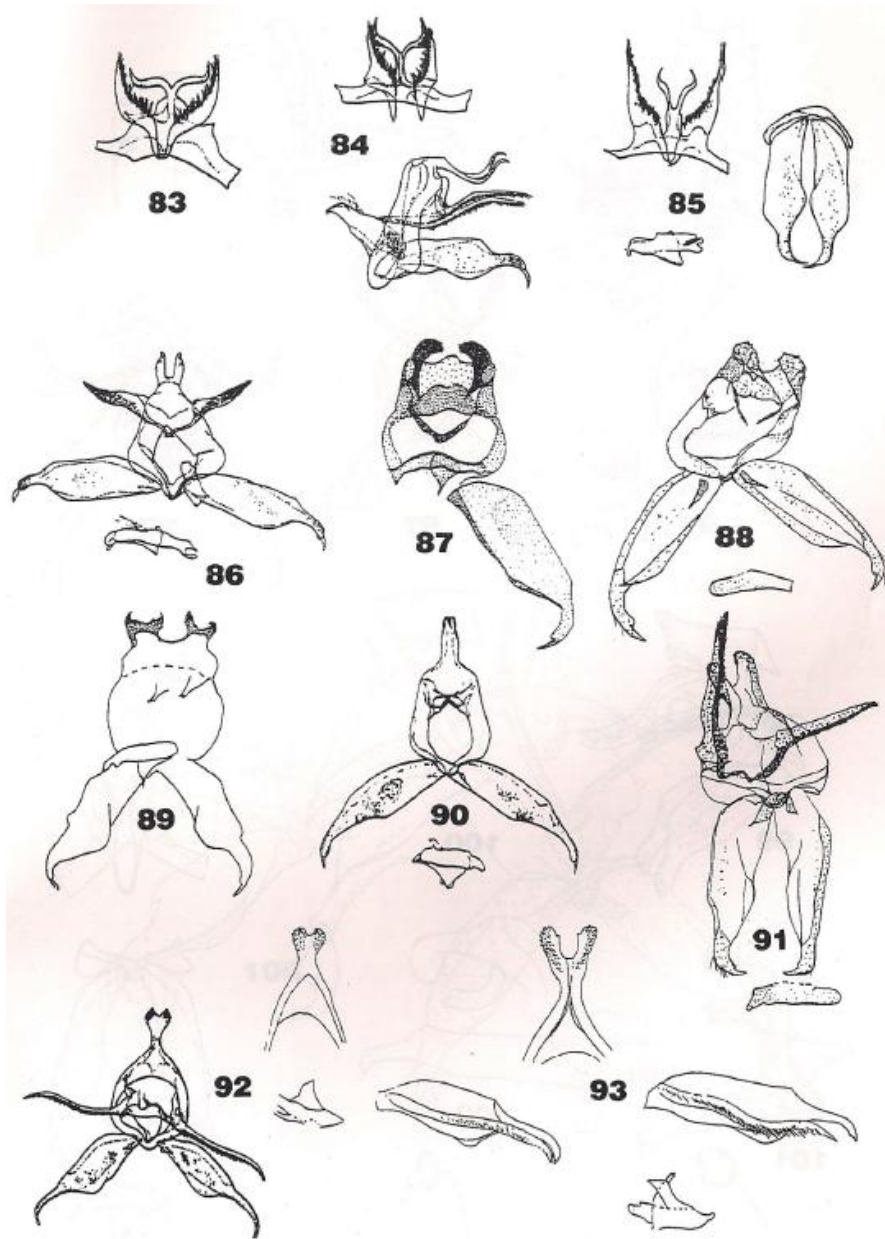


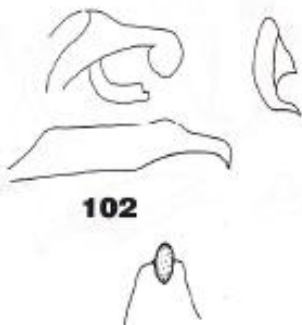
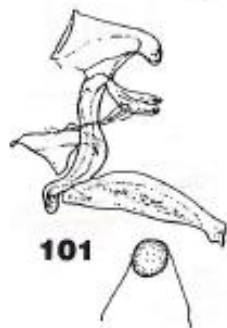
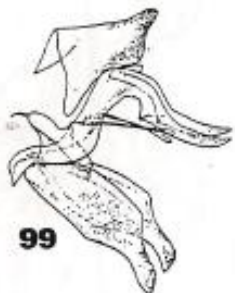
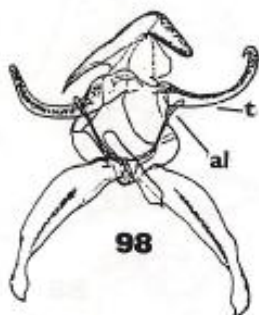
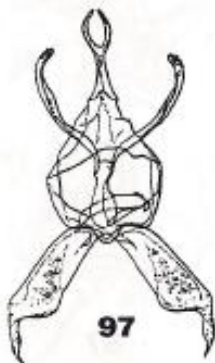
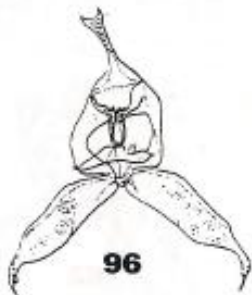
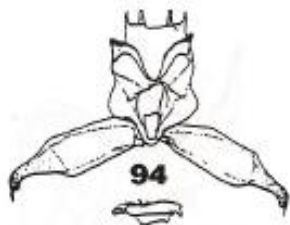
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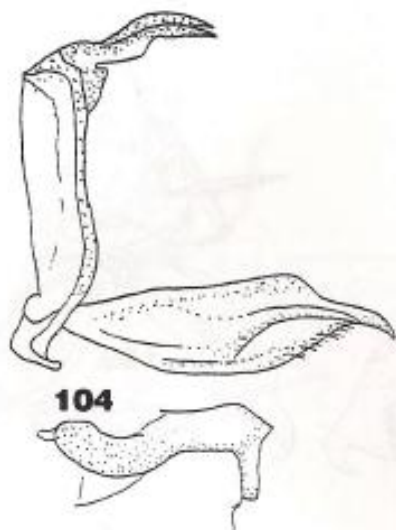


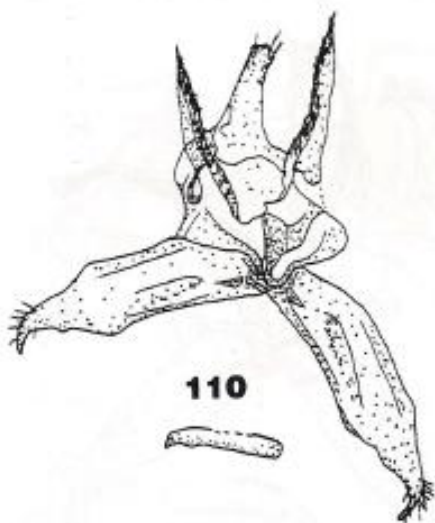
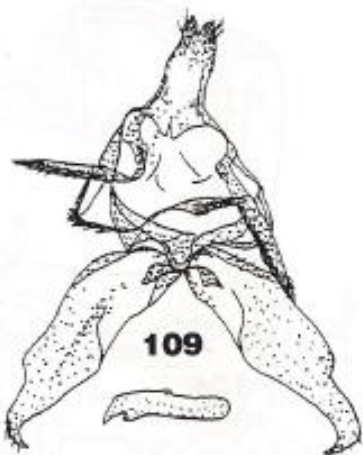
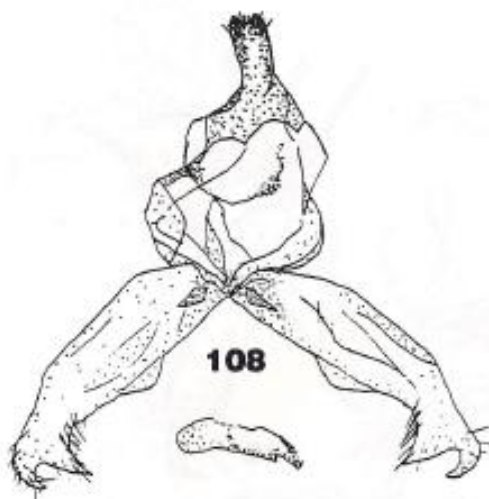


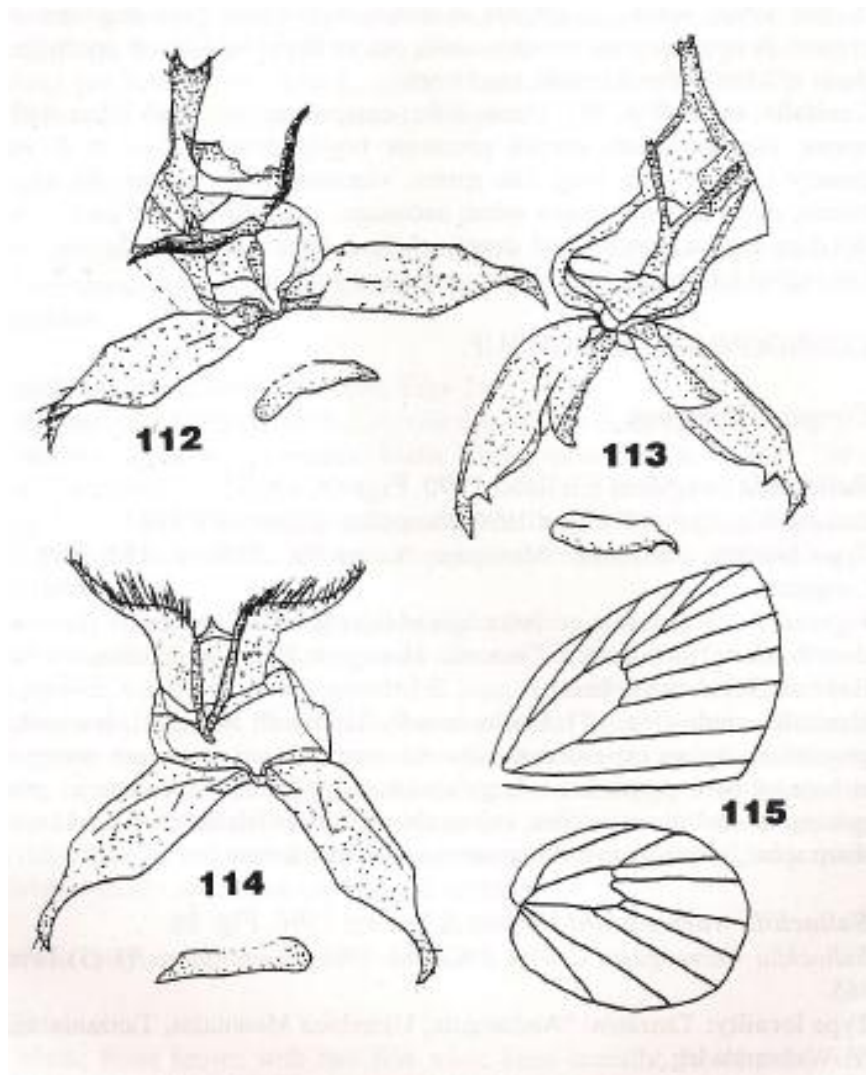












Habits: Specimens have been seen to settle on the bark of tree trunks (Kielland 1990). Little groups of this butterfly are found flying around in the shade of trees (Larsen 1991). Adults congregate at certain trees where *Crematogaster* ants are present. In open savanna country adults can be found settling on dry twigs in the shade of Msasa (*Brachystegia* spp.) trees.

Genitalia, male (Fig. 86). Uncus bifid, comprising two small lobes with blunt apices; tegumen wide; special processes highly developed as in *B. minima*, densely covered with long fine spines; vinculum wide, valves oblong, apices falcate, distal end with sharp spine; aedoeagus ventrally slightly curved, pointed distal projection dorsally and deeply excised distally, dorsal lobe cut obliquely and ventral lobe curved and slightly expanded at tip.

CONGDONI SPECIES GROUP

Congdoni subgroup

Baliochila congdoni Kielland 1990, Figs 6a, 6b, 87.

Baliochila congdoni Kielland 1990, *Butterflies of Tanzania*: 174.

Type locality: Tanzania: “Morogoro, Kanga Mt., 1250 m, 15.ii.1998, T.C.E. Congdon”.

Figures: Adult and male genitalia figured in original description.

Distribution: North-eastern Tanzania: Morogoro; Nguru Mountains.

Habitat: Submontane forest.

Genitalia, male (Fig. 87). Uncus broadly bifid with two short, rounded, distal projections, apices expanded and curved ventrally, with numerous strong spines; at base of each projection a large apophysis; tegumen wide; special processes reduced to sclerotized patches; valves oblong, apices falcate, distal end broad with sharp spine, aedoeagus ventrally curved, distally truncate.

Baliochila warrengashi Collins & Larsen 1996, Fig. 88.

Baliochila warrengashi Collins & Larsen 1996, *Lambillionea* **96** (3) (Tome 1): 465.

Type locality: Tanzania: “Ambangulu, Usambara Mountains, Tanzania, iii. 1993 (P. Walwanda leg.)”.

Figures: Adult figured in original description (Collins & Larsen 1996), and Congdon & Collins 1998. Male genitalia figured in original description.

Distribution: North-eastern Tanzania: Usambara Mountains.

Habitat: Dry montane forest.

Habits: Males are found flying around forest edges in the morning. Both sexes roost on vines along roads throughout the forest. Adults have been recorded in February and March.

Genitalia, male (Fig. 88). Uncus broadly bifid with two short, rounded, distal projections, apices expanded and curved ventrally, with numerous strong spines, smaller than in *B. congdoni* and more rounded; projections connected at base of each projection to a large apophysis; tegumen wide; special processes reduced to sclerotized patches; valves oblong, apices falcate, distal end broad with sharp spine, aedoeagus ventrally curved, distally truncate.

Lequeuxi subgroup

Male upper side with lightly marked borders, wing shape with forewing distinctly acuminate; termen straight. Male genitalia with superficial resemblance to those of *B. dubiosa*.

Baliochila lequeuxi Kielland 1994, Figs 7a, 7b, 89.

Baliochila lequeuxi Kielland 1994, *Lambillionea* **94** (4) (Tome I): 504.

Type locality: Tanzania: "Tanzania, Mafia Island, Mrora Forest, January 1991, Kenneth Karumile."

Figures: Adult figured in original description (Kielland 1994), and in Congdon & Collins 1998. Male genitalia figured in original description, and in Congdon & Collins 1998.

Distribution: Tanzania: Mafia Island; Mrora Forest.

Habitat: Coastal forest.

Flight period: Adults have been recorded in June, November and January.

Genitalia, male (Fig. 89). Uncus with two broad distal asymmetrical projections, apices slightly expanded and bifid, twisted, with numerous strong spines; laterally projecting apophysis absent; base broader than in *B. aslanga* group; tegumen wide; special processes short, bearing numerous strong spines; valves oblong, apices falcate, distal end with sharp spine, aedoeagus ventrally curved, no pointed distal lobes dorsally and not deeply excised ventrally.

***Baliochila confusa* sp. n.**, Figs 41-44, 106.

Description

Head: black; frons brown with two fine white lines laterally; labial palpi with brown and white scales, third joint white-tipped. Antennae: black, ringed with white, club blackish-brown with ochreous tip. Tarsi: black, ringed with white. Thorax: black with ochreous scales and hairs.

Male. Forewing length: 19.0-21.0 mm (n=5). Antenna-wing ratio: 0.43 (n=5). Wings. Forewing apex acute, costa curved, straightening towards apex, termen straight; hind wing somewhat angular. Upper side. Forewing orange-yellow with dark brown markings; apex broadly blackish-brown tapering towards tornus;

inner margin irregular; margin below cubitals very narrow; costal margin dark brown with yellow spots; quadrangular discocellular bar at distal end of cell; size of bar variable but generally large, straight distally and distinct; spots in middle and base of cell; cilia dark brown with flecks of greyish-white. Hind wing: orange-yellow; very narrow linear dark brown terminal band; cilia dark brown flecked with greyish-white. Underside. Forewing: orange-yellow, outer margin dark brownish-grey with markings as on upper side but clearer and more extensive. Hind wing: dark brownish-grey; six transverse rows of small reddish-orange spots outlined with fuscous, situated as in *B. aslanga*; discal row shaded with black distally.

Female. Forewing length: 20.0-21.0 mm (n=4). Antenna-wing ratio: 0.41 (n=4). Similar in size to the male; wing shape slightly more rounded but characteristic wing shape present; ground colour slightly darker than in male; markings similar to male but costal and discocellular markings greatly reduced.

Genitalia, male (Fig. 106). Uncus with two broad distal projections, twisted with inner point at an angle, apices slightly expanded and bifid with numerous strong spines; laterally projecting apophysis absent, base broad; tegumen wide; special processes short and triangular, bearing numerous strong spines; valves oblong, apices falcate, distal end with sharp spine; aedeagus ventrally curved, truncate, not deeply excised ventrally.

Material Examined

Types. Holotype ♂, KENYA: Nairobi, 10.x.1972 (I. Bampton). Paratypes 16♂ 16♀: 4♂ 4♀, as holotype, 12♂ 12♀ as holotype but different dates (S.C. Collins, P. Walwanda, I. Bampton). Holotype and paratypes in ABRI, Kenya; paratypes in Henning Collection.

Distribution: Kenya: Nairobi.

Habitat: Forest and woodland.

Remarks: Adult upper side similar to *B. pseudofragilis* but markings darker and broader with more acute forewing and straighter termen; wing shape closer to *B. lequeuxi*, which has a distinctive underside. Hind wing upper side with distinctive linear marginal line. Underside similar to *B. pseudofragilis*. Male genitalia somewhat variable and confusingly like *B. dubiosa* but retaining distinctive characters found in *B. lequeuxi* and *B. congdoni*. Distal projections of uncus angled and twisted, unlike *B. dubiosa*, where they are in line.

NYASAE SPECIES GROUP

Nyasae subgroup

Baliochila nyasae Stempffer & Bennett 1953, Figs 8a, 8b, 90.

Baliochila nyasae Stempffer & Bennett 1953, *Bulletin of the British Museum (Natural History)* (Entomology) **3**: 92.

Type locality: [Malawi]: “Mlanje, Nyasaland”.

Figures: Adult figured in Stempffer & Bennett 1953, and D’Abrera 1980. Male genitalia figured in Stempffer & Bennett 1953.

Distribution: Southern Malawi: Mlanje district.

Habitat: Montane forest.

Genitalia, male (Fig. 90). Uncus with narrow distal projection formed by apparent fusion of arms, apex slightly expanded and bifid, curved ventrally, with numerous spines; tegumen wide; special processes short, with long fine spines; valves oblong, apices falcate, distal end with sharp spine; aedeagus ventrally curved, truncate apex and excised ventrally.

Baliochila collinsi sp. n., Figs 45-48, 107.

Description

Head: black; frons blackish-brown with two fine white lines laterally; labial palpi with dark brown and white scales, third joint white-tipped. Antennae: black, ringed with white, club black with ochreous tip. Tarsi: black, ringed with white. Thorax: black with ochreous scales and hairs.

Male. Forewing length: 21.0 mm (n=2). Antenna-wing ratio: 0.42 (n=2). Wings. Forewing rounded, costa convex, termen strongly convex; hind wing somewhat angular. Upper side. Forewing orange-yellow with dark brown markings; outer marginal border broad (more than 3 mm) and inner edge angled at M₃; apex broad, extending broadly along costa, not interrupted by yellow spots; discocellular area with narrow subcostal patch, extending down as far as area M₃; subcostal cellular patch and spots in middle and base of cell; cilia dark brown with small flecks of greyish-white. Hind wing: orange-yellow; broad dark brown outer marginal band, inner edge straight, not expanded at apex; cilia dark brown flecked with greyish-white. Underside. Forewing: orange-yellow, outer margin dark brownish-grey with markings as on upper side but clearer and more extensive. Hind wing: dark brownish-grey; six transverse rows of reddish-orange spots outlined with fuscous, situated as in *B. aslanga*; discal row with black distal shading.

Female. Forewing length: 21.0 mm (n=1). Antenna-wing ratio: 0.40 (n=1). Same size as male; wing shape more rounded; ground colour slightly darker than in male; markings similar to male but greatly reduced; costa with orange and black spots; hind wing marginal band narrower.

Genitalia, male (Fig. 107). Uncus with narrow distal projection formed by apparent fusion of arms; apex slightly expanded and bifid, curved ventrally, with numerous spines; tegumen wide; special processes long, bearing long fine spines, almost reaching to tip of uncus; valves oblong, apices falcate, distal end with a

sharp spine; aedoeagus long, ventrally curved, pointed distally and excised ventrally, distal area narrow.

Material Examined

Types. Holotype ♂, TANZANIA: Rondo Plateau, 850 m, 28.ii.2002 (T.C.E. Congdon). Paratypes 2♂ 4♀, as holotype but 5.ii.2002 - 2.iii.2002 (T.C.E. Congdon, I. Bampton, P. Walwanda). Holotype and paratypes in ABRI, Kenya; paratype in Henning Collection.

Distribution: Recorded from Rondo Plateau, 850 m, south-eastern Tanzania.

Habitat: Montane forest.

Habits: Adults have been observed fluttering slowly around forest margins on top of the escarpment together with *B. hildegarda*.

Remarks: Differs from *B. nyasae* in the following features: wings with darker ground colour; forewing with inner edge of border distinctly angled, hind wing border with straighter inner edge; costa broader and darker; underside spots larger and brighter. Male genitalia differ from those of *B. nyasae* in the shorter uncus, larger special processes (being five times as long as those of *B. nyasae*) and the longer and distally narrower aedoeagus.

Etymology: Named for Steve Collins of ABRI who has contributed so much to the knowledge of Afrotropical butterflies.

***Baliochila megadentata* sp. n.**, Figs 49-52, 108.

Description

Head: black; frons blackish-brown with two fine white lines laterally; labial palpi with dark brown and white scales, third joint white-tipped. Antennae: black, ringed with white; club black with ochreous tip. Tarsi: black, ringed with white. Thorax: black with ochreous scales and hairs.

Male. Forewing length: 15.0-17.0 mm (n=2). Antenna-wing ratio: 0.42 (n=2). Wings. Forewing rounded, costa and termen convex; hind wing rounded. Upper side. Forewing yellowish-orange with dark brown border; terminal border very broad, expanding at apex, extending along costa uninterrupted by yellow spots; discocellular area with subcostal patch extending down as far as area M₃; subcostal cellular patch incorporated into border, leaving yellowish-orange patch; cilia dark brown. Hind wing: yellowish-orange patch present; dark brown terminal band very broad, extending almost to base along anal margin, not expanded at apex, cilia dark brown. Underside. Forewing: orange-yellow, termen brownish-grey, with markings as on upper side but usually slightly clearer and more extensive. Hind wing: reddish-brown; six transverse rows of orange-yellow spots outlined with fuscous, situated as in *B. aslanga*.

Female. Forewing length: 20.0-23.0 mm (n=2). Antenna-wing ratio: 0.40 (n=2). Female larger than male, wing shape more rounded; ground colour slightly paler than in male; markings similar to male but reduced along forewing costa, and marginal bands narrower.

Genitalia, male (Fig. 108). Uncus with flat, fairly narrow distal projection formed by apparent fusion of arms, apex slightly expanded and bifid, curved ventrally, with spines; tegumen wide; special processes reduced to small sclerotized patch with small spines; valves oblong, ventrally convex and with large and pointed, hairy, tooth-like lobe just before apex; apices falcate, distal end with sharp spine; aedoeagus long, ventrally curved, truncate apex, and excised ventrally.

Material Examined

Types. Holotype ♂, TANZANIA: Udzungwe Mountains, Sanji, 1000 m, 21.ii.2000 (T.C.E. Congdon, I. Bampton, P. Walwanda, Martin). Paratypes 92♂ 41♀, as holotype but 20 -29.ii.2000 (T.C.E. Congdon, I. Bampton, P. Walwanda, M. Hassan). Holotype and paratypes in ABRI, Kenya; paratypes in Henning Collection.

Distribution: Udzungwe Mountains, Sanji, at 1000 m, central Tanzania.

Habitat: Moist montane forest.

Habits: Adults fly around forest margins and clearings, and have been found roosting on dead twigs along the Sanji River together with *B. abri*.

Remarks: Differs from *B. nyasae* in the extremely broad dark brown borders and larger spots on the underside. The male genitalia differ from those of *B. nyasae* in the broader and flatter distal projection of the uncus, the extremely reduced special processes with small spines, and the large “tooth-like” lobe near the apex of the valve.

Etymology: Named after the distinctive large “tooth-like” lobe on the valve of the male genitalia.

Nguru subgroup

Compared to the *nyasae* subgroup this subgroup has a paler ground colour, the underside has the post-discal series larger and distinctly paler, and the submarginal spots are bright reddish-orange with dark brown basally.

Baliochila nguru Kielland 1986, Figs 9a, 9b, 91.

Baliochila nguru Kielland 1986, *Lambillionea* **86**: 141.

Type locality: Tanzania: “Morogoro, Nguru Mts, Mkombola, 1200 m”.

Figures: Adult figured in Kielland 1990. Male genitalia figured in original description.

Distribution: Tanzania: Nguru Mountains.

Habitat: Primary forest from 1 200 to 1 400 m (Kielland 1990).

Habits: Adults frequently settle on the bark of trees (Kielland 1990).

Genitalia, male (Fig. 91). Uncus with flat fairly broad distal projection formed by apparent fusion of arms at base and strongly bifid distal half, apex slightly curled over, with spines; tegumen wide; special processes very long, extending beyond apex of uncus, with fine spines; valves oblong, ventrally convex, apices falcate, distal end with a sharp spine; aedoeagus long, ventrally curved, truncate apex and strongly excised ventrally.

Baliochila citrina sp. n., Figs 53-56, 109.

Description

Head: black; frons black with two fine white lines laterally; labial palpi with brown and white scales, third joint white-tipped. Antennae: black, ringed with white; club black with ochreous tip. Tarsi: black, ringed with white. Thorax: black with ochreous scales and hairs.

Male. Forewing length: 20 mm (n=2). Antenna-wing ratio: 0.46 (n=2). Wings. Forewing elongated, costa and termen convex; hind wing elongated. Upper side. Forewing lemon yellow with dark brown markings; outer marginal border fairly broad and of even width; apex broad, extending broadly along costa, small yellow spots present; discocellular area with subcostal patch extending down as far as area M_2 ; subcostal cellular patch and spots in middle and base of cell; cilia dark brown chequered with greyish-white. Hind wing: lemon yellow; narrow dark brown outer marginal band of even width, cilia dark brown chequered with greyish-white. Underside. Forewing: orange-yellow, outer margin brownish-grey with markings as on upper side but clearer and more extensive. Hind wing: reddish-brown; six transverse rows of orange-yellow spots outlined with fuscous situated as in *B. aslanga*; post-discal series lighter in colour and sub-marginal spots bright reddish-orange with dark brown basally.

Female. Forewing length: 20 mm (n=1). Antenna-wing ratio: 0.41 (n=1). Similar in size to male; wing shape more rounded; ground colour slightly darker than male; markings similar to male but reduced along forewing costa and marginal bands narrower. Underside markings similar to male but paler.

Genitalia, male (Fig. 109). Uncus with flat, fairly broad distal projection formed by apparent fusion of arms at base and strongly bifid tip, apex pointed with spines; tegumen wide; special processes not long, not extending much beyond base of distal projection of uncus, with fine spines; valves oblong, ventrally

convex, apices falcate, distal end with sharp spine; aedoeagus long, ventrally curved, truncate apex and strongly excised ventrally.

Material Examined

Types. Holotype ♂, TANZANIA: Bunduki-Nyachilo, Uluguru Mountains, 1 400 m, 14.iii.2001 (T.C.E. Congdon, I. Bampton). Paratypes 38♂ 19♀, as holotype but ii & iii.2001 (T.C.E. Congdon, I. Bampton, P. Walwanda, M. Hassan). Holotype and paratypes in ABRI, Kenya; paratypes in Henning Collection.

Distribution: Tanzania: Uluguru Mountains.

Habitat: Montane and riverine forest.

Habits: Adults fly around montane forest margins and in riverine vegetation at lower altitudes.

Remarks: Differs from *B. nguru* in its broader borders and costa, lemon yellow ground colour, and smaller but more brightly coloured underside spots. Male genitalia differ from those of *B. nguru* in the narrower distal projection, bifid only at the tip, and the much shorter special processes.

Etymology: Named after the distinctive lemon yellow ground colour.

Baliochila abri sp. n., Figs 57-60, 110.

Description

Head: black; frons dark brown with two fine white lines laterally; labial palpi with dark brown and white scales, third joint white-tipped. Antennae: black, ringed with white; club black with ochreous tip. Tarsi: black, ringed with white. Thorax: black with ochreous scales and hairs.

Male. Forewing length: 13-14 mm (n=2). Antenna-wing ratio: 0.46 (n=2). Wings. Forewing rounded, costa and termen convex, costa strongly so; hind wing rounded. Upper side. Forewing yellow with dark brown markings; terminal border broad; apex broad, extending along costa and expanded into a black patch in cell, small yellow spots present; discocellular area with subcostal patch extending down as far as, and including, area M_2 , with cellular spots in subcostal cellular patch; cilia dark brown chequered with greyish-white. Hind wing: yellow patch on inner margin, rest of wing dark brown; cilia dark brown chequered with greyish-white. Underside. Forewing: yellow; outer margin brownish-grey with markings as on upper side but clearer and more extensive. Hind wing: reddish-brown; six transverse rows of fairly large orange-yellow spots outlined with fuscous situated as in *B. aslanga*; post-discal series lighter in colour with dark fuscous distally; sub-marginal spots bright reddish-orange with dark brown basally.

Female. Forewing length: 18 mm (n=1). Antenna-wing ratio: 0.43 (n=1). Female larger than male; wing shape more rounded; ground colour slightly darker than in

male; markings similar to male but reduced along forewing costa and marginal bands narrower. Underside markings similar to male but paler.

Genitalia, male (Fig. 110). Uncus with flat, fairly long and narrow distal projection formed by apparent fusion of arms at base and weakly bifid tip, apex with small spines; tegumen not very wide; special processes long, extending just beyond apex of distal projection of uncus, with fine spines; valves oblong, bulging ventrally centrally, apices falcate, distal end with sharp spine; aedoeagus long, ventrally curved, pointed apex and excised ventrally.

Material Examined

Types. Holotype ♂, TANZANIA: Udzungwa Mountains, 1 000 m, 4.ii.2000 (T.C.E. Congdon, I. Bampton, P. Walwanda, Martin). Paratypes 37♂ 25♀, as holotype but ii & iii.2001 (T.C.E. Congdon, I. Bampton, P. Walwanda, M. Hassan). Holotype and paratypes in ABRI, Kenya; paratype in Henning Collection.

Distribution: Tanzania: Udzungwa Mountains, central Tanzania, at 1 000 m.

Habitat: Moist montane forest.

Habits: Flies around forest margins and in forest clearings. Adults have been found roosting on dry twigs along the Sanji River together with *B. megadentata*.

Remarks: Differs from *B. nguru* in the very broad margins of the forewing and almost entirely dark brown hind wing; underside spots smaller and brighter. The male genitalia differ from those of *B. nguru* in the distal projection only being bifid at the tip and much narrower; the special processes are slightly broader and shorter.

Etymology: Named for the African Butterfly Research Institute, which has contributed so much to research on Afrotropical butterflies, and whose members discovered this species.

Fragilis subgroup

Adults with a *Cnodontes*-like appearance; uncus with distal projection flattened, with a stalk, and expanded into a large flattened bifid disc.

Baliochila fragilis Stempffer & Bennett 1953, Figs 10a, 10b, 92

Baliochila fragilis Stempffer & Bennett 1953, *Bulletin of the British Museum (Natural History)* (Entomology) **3**: 95.

Type locality: [Kenya]: “Meru, 6000”.

Figures: Adult figured in Stempffer & Bennett 1953, D’Abrera 1980, and Larsen 1991. Male genitalia figured in Stempffer & Bennett 1953, and Larsen 1991.

Distribution: Southern Somalia (Somaliland). Eastern Kenya: Meru Forest; Nairobi; Kibwezi; Teita; Bura; Makindu; Chuka; Muani; Masongaleni; Mto-ya-

Mawe; Ukamba country; Thika Falls (Larsen 1991); Gheni; Ukamba; Samburu; Kedai; Kima. Northern Tanzania: At the foot of the South Pare Mts near Same (800 m) (Kielland 1990).

Uganda: Tororo.

Habitat: In Tanzania in deciduous thorn-bush country at 800 m (Kielland 1990). In Kenya at altitudes between 600 and 1 800 m. Forest and woodland (Larsen 1991). Deciduous semi-arid scrub and wooded steppe from 600 to 1 800 m (Ackery *et al.* 1995).

Habits: Specimens have been seen resting on the bark of tree trunks (Kielland 1990). Often settles, in small clusters, on twigs and these aggregations may include pairs *in copula* (Larsen 1991).

Genitalia, male (Fig. 92). Uncus with flat, fairly long and very narrow distal projection, this stalk expanded distally into large flattened disc with bifid tip, apex with small spines and two small distad teeth beneath apex; tegumen triangular; special processes very long and slender, almost straight, with long fine spines, extending laterad; valves oblong, bulging ventrally centrally, apices falcate, distal end with sharp spine; aedoeagus short and thick, distal end truncate.

Baliochila pseudofragilis Kielland 1976, Fig. 93.

Baliochila pseudofragilis Kielland 1976, *Entomologische Berichten, Amsterdam* 36: 105.

Type locality: Tanzania: "Arusha, Usa River, 1500 m".

Figures: Adult and male genitalia figured in original description.

Distribution: Tanzania: Arusha town; Usa River; slopes of Mt Meru; Lolkisale Mt; close to the Kenya border, between Namanga and Mt. Longido (Kielland 1990).

Habitat: Forest margins and open patches in forest at altitudes from 1 400 to 1 800 m (Kielland 1990).

Habits: Specimens often settle on the bark of tree trunks (Kielland 1990).

Genitalia, male (Fig. 93). Uncus with flat, fairly long, narrow, distal projection, this stalk expanded distally into two large flattened lobes, apex and sides covered with small spines, each with small tooth on inner edge near apex; tegumen triangular; special processes very long and slender, with long fine spines, extending laterad, slightly shorter than in *B. fragilis*; valves oblong, bulging ventrally centrally, apices falcate, distal end with sharp spine; aedoeagus short and thick, distal end truncate.

STYGIA SPECIES GROUP

Baliochila stygia Stempffer & Bennett 1953, Figs 11, 94.

Baliochila stygia Stempffer & Bennett 1953, *Bulletin of the British Museum (Natural History)* (Entomology) **3**: 93.

Type locality: [Kenya]: “Mombasa, 14 m. N.W. of Rabai, 700 ft.”.

=*stygia* Talbot 1937 (as f. of *Teriomima minima*), *Transactions of the Royal Entomological Society of London* **86**: 72. [Kenya]: “Rabai, 700', 14 miles north-west of Mombasa”.

Figures: In original description (Holotype); female figured in Stempffer & Bennett 1953, D'Abbrera 1980, and Larsen 1991 (probably not *B. stygia* but *B. dubiosa*). Male genitalia figured in Stempffer & Bennett 1953, and Larsen 1991.

Distribution: Kenya coast: Rabai; Mombasa; Arabuko-Sokoke Forest (Larsen 1991). Tanzania: North coast, including Pemba Island.

Habitat: Coastal forest.

Genitalia, male (Fig. 94). Uncus quadrate with four small distal points of equal length; tegumen very wide; special processes short and stout, clothed with bristles; vinculum broad; valves oblong, apices falcate, distal end with sharp spine; aedoeagus small, ventrally curved, deeply incised ventrally near distal end.

Baliochila fusca sp. n., Figs 61, 62, 12, 111.

Description

Head: black; frons black with two fine white lines laterally; labial palpi with black and white scales, third joint white-tipped. Antennae: black, ringed with white; club black with ochreous tip. Tarsi: black, ringed with white. Thorax: black with ochreous scales and hairs.

Male. Forewing length: 11-2 mm (n=2). Antenna-wing ratio: 0.46 (n=2). Wings. Forewing rounded, costa and termen convex; hind wing rounded. Upper side. Forewing blackish-brown with some orange scaling on inner margin; cilia dark brown. Hind wing: basal half orange, distal half blackish-brown; inner margin slightly concave; cilia dark brown. Underside. Forewing: orange-yellow; outer margin dark brownish-grey with markings as in *B. stygia*. Hind wing: dark reddish-brown; six transverse rows of reddish-orange spots outlined with fuscous and situated as in *B. aslanga*.

Female. Forewing length: 11 mm (n=1). Antenna-wing ratio: 0.42 (=1). Female generally larger than male; wing shape more rounded; ground colour paler than in male. Forewing. Upper side with broad apical patch angled towards margin and tapering towards tornus; costa broadly infuscated with black dots. Hind wing markings confined to narrow dark border. Underside similar to male but with markings larger.

Genitalia, male (Fig. 111). Uncus hemispherical with four distal points, central pair five times larger than outer pair; tegumen very wide; special processes short and stout, with bristles around rim; vinculum broad; valves oblong, apices

falcate, distal end with sharp spine; aedoeagus small, ventrally curved, deeply excised ventrally near distal end.

Material Examined

Types. Holotype ♂, TANZANIA: Rondo Plateau, 850 m, 2.iii.2002 (T.C. E. Congdon). Paratypes 6♂ 3♀, as holotype but 5.ii.2002 – 2.iii.2002 (T.C.E. Congdon, I. Bampton, P. Walwanda). Holotype and paratypes in ABRI, Kenya; paratype in Henning Collection.

Distribution: Only recorded from the Rondo Plateau, at 850 m, south-eastern Tanzania.

Habitat: Montane forest. This species displays a common dark mimetic pattern of which the *Teriomima* group has four representatives in three genera on the Rondo Plateau. *B. fusca* flies together with *Baliochila latimarginata rondoensis*, *Congdonia duplex* and *Eresinopsides bamptoni* in the canopy above roads, and in clearings in forest. A fifth species, and fourth genus, *Euthecta cooksoni subgrisea* is also found flying with these species on the Rondo Plateau.

Remarks: Differs from *B. stygia* in the smaller orange areas on the upper side. The male genitalia differ from those of *B. stygia* in the hemispherical uncus with different sized distal points, the outer points being smaller.

WOODI SPECIES GROUP

Baliochila woodi (Riley 1943), Figs 13a, 13b, 95.

Teriomima woodi Riley 1943, *Entomologist* **76**: 225.

Type locality: [Malawi]: “at 2500 ft., Mt. Mlanje, Nyasaland”.

Figures: Adult figured in D’Abrera 1980. Male genitalia figured in Stempffer & Bennett 1953.

Distribution: Malawi: Southern Malawi - Mlanje Mountain; Mlosa River.

Habitat: Densely-shaded shrub layer of *Newtonia* gallery forest (Gifford 1965). Riverine forest (Ackery *et al.* 1995).

Genitalia, male (Fig. 95). Uncus with flat, fairly long and very narrow distal projection, this stalk expanded distally into flattened bifid lobe; tegumen moderate; special processes very long and slender with short bristles; valves oblong, apices falcate, distal end with sharp spine; aedoeagus long, tapering evenly to truncate tip.

Baliochila mwanihanae Congdon, Kielland & Collins 1998 **stat. n.**, Figs 63, 64, 112.

Baliochila woodi mwanihanae Congdon, Kielland & Collins 1998, *in*: Congdon & Collins 1998, *Supplement to Kielland’s butterflies of Tanzania*: 63.

Type locality: Tanzania: “Ifakara, Mwanihana, 29.xii.1985, J. Kielland.” Holotype in ABRI, Kenya.

Figures: Adult female figured in original description and Kielland 1990.

Distribution: Tanzania, on the slopes of Mwanihana Mountain in the Udzungwa Range at 1 100 m.

Habits: The female taken by Kielland in Tanzania was settled on the stem of a tree (Kielland 1990).

Description of male: Upper side, forewing dark brown with small patch of orange scales on inner margin; hind wing orange with broad black border extending to base along anal margin. Underside similar to *B. pringlei*.

Remarks: This species is intermediate between *B. woodi* and *B. pringlei*, both in appearance and male genitalia structure, as well as in its distribution. However, the genitalic differences are of such a magnitude that there can be little doubt that these are distinct species.

Genitalia, male (Fig. 112). Uncus with flat, smoothly expanding, fairly long, distal projection with strongly bifid tip; tegumen moderate; special processes moderately long and slender with short bristles, extending to base of distal projection of uncus; valves oblong, apices falcate, distal end with sharp spine; aedoeagus long, ventrally curved, tapering to truncate tip.

Baliochila pringlei Stempffer 1967, Fig. 96.

Baliochila pringlei Stempffer 1967, *Bulletin de l'Institut Fondamental de l'Afrique Noire (A)* **29**: 987.

Type locality: Tanzania: “NE Tanzania, Usambara, Amani”.

Figures: Adult and genitalia figured in original description.

Distribution: Tanzania: Usambara Mountains.

Habitat: Montane forest.

Genitalia, male (Fig. 96). Uncus with flat, fairly long and very narrow distal projection expanded at tip into strong bifid fork; tegumen moderate; special processes very small and triangular with short bristles; valves oblong, apices falcate, distal end with sharp spine; aedoeagus long, tapering evenly to truncate tip.

SINGULARIS SPECIES GROUP

This group exhibits distinctive genitalic differences (Stempffer & Bennett 1953), with affinities to *Cnodontes* and *Congdonia*. The only member is a woodland species, like *Cnodontes* spp.

Baliochila singularis Stempffer & Bennett 1953, Figs 14a, 14b, 97.

Baliochila singularis Stempffer & Bennett 1953, *Bulletin of the British Museum (Natural History)* (Entomology) **3**: 100.

Type locality: “Durban” (*patria falsa*)

martyini Bennett 1969 (as f. of *Baliochila singularis*), *Entomologist* **102**: 73. [Zimbabwe]: “S. Rhodesia: Danga Lima Farm, Melfort, Bromley”.

Figures: Adult figured in Stempffer & Bennett 1953, D’Abrera 1980, and Pringle *et al.* 1994. Male genitalia figured in Stempffer & Bennett 1953.

Distribution: Botswana: Shakawe. Zimbabwe: Widespread – Mutare; Mapembi; Bazeley Bridge; Bromley; Filabusi; Bulawayo; Marondela; Odzi.

Habitat: Bushveld; *Brachystegia* woodland.

Habits: ‘Over 30 specimens were found on one *Heteropyxis natalensis* tree with withered leaves, feeding on the secretions of membracid sap-sucking insects’ (R. Plowes pers. comm.). Adults fly slowly, settling on dead twigs, generally less than three metres above the ground. If disturbed the butterfly can show a fair turn of speed when escaping (Pringle *et al.* 1994).

Genitalia, male (Fig. 97). Uncus consisting of two narrow bifid lobes on end of long narrow stalk, stalk being longer than lobes, not fused with tergite of A₈; special processes absent; valves oblong, apices strongly falcate, distal end with sharp spine; aedoeagus long, subcylindrical and pointed distally. No distal lobes dorsally nor is aedoeagus deeply incised ventrally; anellus lobes large, long, slender and excurved at apices, which are heavily spined; no apparent tegumen processes.

Genus *Cnodontes* Stempffer & Bennett 1953

Bulletin of the British Museum (Natural History) (Entomology) **3**: 101.

Type-species: *Durbania pallida* Trimen, by original designation.

Head small; eyes glabrous; labial palpi long, second segment laterally compressed; antennae short, with distinct subcylindrical club; thorax short and slender; male forelegs with unsegmented tarsi, clothed beneath with fine spines. Wings, costa and termen convex; hind wing oval. Forewing with 12 veins (Stempffer 1967). Coloration of head, antennae, body and legs similar to *Teriomima*.

Genitalia, male. Uncus fused to eighth tergite, which forms a sort of sheath; no subunci; tegumen triangular with two long digitate processes arising from base (tegumen processes), these processes not connected to anellus; vinculum wide; valves oblong, apices falcate, distal end acute. Aedoeagus long, ventrally curved and tapering to a ventral point; pair of long slender arms arising from dorsal surface of anellus (anellus lobes) and resting parallel with processes from base of tegumen.

The characters and genitalia of the genus are described and figured by Stempffer & Bennett 1953, Bennett 1954, Stempffer 1967, Hemming 1967, and Eliot 1973.

KEY TO THE SPECIES OF THE GENUS *CNODONTES*

1. Tegumen processes long .. 2
- Tegumen processes not long .. 3

2. Tegumen processes evenly curved, with a strong hook distally, valve narrow .. *pallida* (Fig. 98)
- Tegumen processes not evenly curved, without a strong hook distally, valve not narrow .. *penningtoni* (= *vansoni*) (Fig. 99)

3. Tegumen processes short and strongly curved, uncus laterally compressed distally .. *bouyeri* (Fig. 102)
- Tegumen processes not short nor strongly curved, uncus not laterally compressed distally .. *vansomereni* (Fig. 101)

Cnodontes pallida (Trimen 1898), Figs 15a, 15b, 98.

Durbania pallida Trimen 1898, *Transactions of the Entomological Society of London* **1898**: 12.

Type locality: [Zimbabwe]: “Gadzima, Umfuli River, Mashunaland”.

Figures: Adult figured in Stempffer & Bennett 1953, D’Abrera 1980, Pringle *et al.* 1994, and Heath *et al.* 2002. Male genitalia figured in Stempffer & Bennett 1953.

Distribution: Zimbabwe: Widespread – Gadzema; Matobo Hills; Harare; Mutare; Hot Springs; Nyanyadzi. Zambia: Lower Zambezi and Luangwa Valley; Chirundu; Choma (Heath *et al.* 2002). Botswana: Northern borders; Okavango Swamps; Ghanzi. Namibia: Northern borders; Bagani; Katima Mulilo. Mozambique: Western areas. Swaziland: Duke *et al.* 1999 (probably refers to *C. penningtoni*). South Africa: No confirmed records (possible female from Thohoyandou, Limpopo Province).

Habitat: Bushveld; Miombo woodland. Dense woodland during the wet season (Heath *et al.* 2002).

Genitalia, male (Fig. 98). Uncus fused to eighth tergite, which forms a simple lobe; tegumen triangular, with two long slender digitate processes with hooked apices; vinculum wide; valves oblong, apices falcate, distal end acute; aedeagus long, subcylindrical, tapering to ventral point; anellus lobes very long and slender, slightly spatulate at apices.

Cnodontes penningtoni Bennett 1954, Figs 99, 100.

Cnodontes penningtoni Bennett 1954, *Entomologist* **87**: 171.

Type locality: [Botswana]: “Cape Province, Lobatzi”.

Figures: Adult figured in D’Abrera 1980, and Pringle *et al.* 1994. Male genitalia figured in original description, Stempffer & Bennett 1956, and Henning & Henning 1989.

Distribution: Botswana: Lobatse; Mahalapye; Chobe. South Africa: North West Province; Limpopo Province; Mpumalanga; Gauteng; northern KwaZulu-Natal; Northern Cape Province; Setlagole. Swaziland: Bushveld areas. Mozambique: Southern areas - Goba.

Habitat: Bushveld.

Genitalia, male (Figs 99, 100). Uncus fused to eighth tergite, which forms a simple lobe; tegumen triangular with two moderately long, curved and slender digitate processes; vinculum wide; valves oblong, broader than other species, apices falcate, distal end acute; aedoeagus long, subcylindrical, tapering to long, finely pointed hook; anellus lobes very long and slender, spatulate at apices.

=*Cnodontes vansoni* Stempffer & Bennett 1956, **syn. n.**

Cnodontes vansoni Stempffer & Bennett, 1956, *Entomologist* **89**: 115.

Type locality: South Africa: “Salt Pan, Pretoria”.

Henning & Henning 1989 presented details and figures. Considered a genitally aberrant specimen of *Cnodontes penningtoni* Bennett in Pringle *et al.* 1994.

Genitalia, male. The tegumen processes are short and curved with hooked apices; valves oblong, extended to narrow apex. A specimen of *C. penningtoni* has been recorded that exhibited aberrant tegumen processes such as this on one side only. The structure of the genitalia indicates injury at eclosion and *C. vansoni* therefore is no longer considered a valid species. Numerous specimens from the type locality have been examined and all have proved to be *C. penningtoni*.

Cnodontes vansomereni Stempffer & Bennett 1953, Fig. 101.

Cnodontes vansomereni Stempffer & Bennett 1953, *Bulletin of the British Museum (Natural History)* (Entomology) **3**: 103.

Type locality: [Kenya]: “Migori Valley, 4200', S. Kavirondo”.

Figures: Adult figured in Stempffer & Bennett 1953, Gifford 1965, D’Abrera 1980, Larsen 1991, and Heath *et al.* 2002. Male genitalia figured in Stempffer and Bennett 1953.

Distribution: Kenya: Fairly widespread in the south-west. Tanzania: Most parts except coastal forested areas. Malawi: Shire Valley; Sumbu Coalfield; Mpatamanga Gorge (Gifford 1965). Zambia: Widespread from Lusaka

northwards. Democratic Republic of Congo: Lualaba; Haut-Shaba. Angola: Kalweba River.

Habitat: Deciduous woodland (thorn-bush and *Brachystegia* woodland) (Kielland 1990).

Habits: This appears to be a fairly gregarious species, with numbers sometimes found endlessly circling a favourite tree (Larsen 1991). Females lay eggs on lichens growing on trees (Kielland 1990). Gregarious, often common, and performing endless hovering flights in groups up and down trunks of trees (Gifford 1965).

Genitalia, male (Fig. 101). Uncus small and triangular, with rounded apex; tegumen triangular with two fairly short, curved and lobed processes with rounded apices; vinculum wide; valves oblong, apices falcate, distal end serrated and acute; aedoeagus long, subcylindrical, tapering to pointed, ventrally-inclined apex; anellus lobes long and slender, spatulate at apices.

Cnodontes bouyeri Kielland 1994, Fig. 102.

Cnodontes bouyeri Kielland 1994, *Lambilliona* **94** (4) (Tome I): 503.

Type locality: [Democratic Republic of Congo]: “Zaire, Shaba, Lake Ripungwe, 15.II.1983, Thierry Bouyer.” Holotype in MRAC, Tervuren.

Figures: Adult and male genitalia figured in original description.

Distribution: Democratic Republic of Congo. Known only from the type locality.

Habitat: Woodland.

Genitalia, male (Fig. 102). Uncus small and triangular, with laterally compressed apex; tegumen triangular with two short strongly curved processes with abruptly ending apices and a rounded protuberance at lower end; vinculum wide; valves oblong, apices falcate; aedoeagus long, subcylindrical, tapering to pointed, ventrally inclined apex; anellus lobes long and slender, spatulate at apices.

Note: Apparently only known from the type specimen.

Genus Congdonia gen. n., Figs 19, 113, 115.

Type species: *Congdonia duplex* sp. n., by present designation. Gender: feminine.

Description

Head small; eyes glabrous; labial palpi long, second segment laterally compressed, third segment cylindrical; antennae very short with distinct subcylindrical club; antenna-wing ratio 0,41 (*Baliochila* 0,45, *Eresinopsides* 0,48); thorax short and slender; male forelegs with unsegmented tarsi, clothed beneath with fine spines. Wings. Costa and outer margin convex; hind wing oval. Forewing with 11 veins. Wing venation similar to *Eresinopsides* but differs as follows: forewing origin of veins M_2 and M_3 closer; M_3 and CuA_1 wider apart than M_2 and M_3 ; hind wing M_3 and CuA_1 distinctly separate at origin (Figs 19, 115).

Genitalia, male (Fig. 113). Uncus conical with smooth narrow distal projection which is bifid at tip; tegumen wide; special processes obsolete except for sclerotized tissue; anellus lobes large, long, slender and broadened slightly at apices, which are heavily spinous for most of their length; valves oblong, apices falcate, distal end with sharp spine and additional ventral spine at base of distal lobe; from ventral base of valve a large, acuminate, marginally serrated flap, which is half length of valve; resembles a harpe but is separated, and hinged, from base of valve; aedoeagus short and broad, rhombic in shape, with ventrally pointed distal apex; a second ventral point a quarter of the way from apex; ventrally very slightly curved.

Diagnosis: The underside markings are distinctly pale and translucent in comparison to those of the related genera *Baliochila* and *Eresinopsides*. The upper side markings are distinctive but with a mimetic pattern found in a number of butterfly genera and which appears to serve the purpose of seemingly splitting the insect in half when it opens its wings and raises its forewings. The male genitalia appear to have residual special processes and have distinctly shaped anellus lobes. The aedoeagus is much broader than in related genera and distinctly shaped. The valve has an additional ventral spine and the large serrated flap on the valve is unique. The wing venation is similar to *Eresinopsides* but not to *Baliochila*.

Etymology: Named for Colin Congdon who has contributed so much to research on Afrotropical butterflies and to this genus group in particular.

Congdonia duplex sp. n., Figs 19, 65, 66, 113, 115.

Description

Head: black; frons black with two fine white lines laterally; labial palpi with brown and white scales, third joint white-tipped. Antennae: black, ringed with white; club black with ochreous tip. Tarsi: black, ringed with white. Thorax: black with ochreous scales and hairs.

Male. Forewing length: 10 mm (n=1). Antenna-wing ratio: 0.41 (n=1). Wings. Forewing rounded, costa and termen convex; hind wing rounded. Upper side. Forewing: dark brown without orange markings. Hind wing: basal half orange-yellow, distal half dark brown, inner edge of margin strongly concave, curving smoothly from apex to base of anal margin; cilia dark brown. Underside. Very pale and translucent with indistinct markings. Forewing: very pale orange-yellow, outer margin very pale brownish-grey with subapical, post-discal and cellular greyish-brown markings outlined with fuscous. Hind wing: very pale brownish-grey; six transverse rows of greyish-brown spots outlined with fuscous; first row basal, second crossing the cell, third medial, fourth discal, fifth post-discal and sixth consisting of a series of triangular sub-marginal spots.

Female. Unknown.

Genitalia, male (Fig. 113). Uncus with two narrow distal projections, apices slightly expanded and curved ventrally, with numerous strong spines; base of each projection with small, laterally projecting apophysis; tegumen wide; special processes strongly curved, apices broadened, bearing numerous strong spines; valves oblong, apices falcate, distal end with sharp spine; aedeagus ventrally curved, with pointed distal lobes dorsally and deeply incised ventrally.

Material Examined

Types. Holotype ♂, TANZANIA: Rondo Plateau, 5.ii.2002 (T.C. E. Congdon). Paratype 1♂, as holotype. Holotype and paratype in ABRI, Kenya.

Distribution: Recorded from Rondo Plateau, 850 m, south-eastern Tanzania.

Habitat: Montane forest.

Habits: Of the four species with similar mimetic patterns occurring on the Rondo Plateau (see under *Baliochila fusca*) this is the most seldom seen.

Remarks: A distinct genus and species.

Etymology: This species displays a common mimetic pattern which appears to divide the insect into two when the forewings are raised, hence the name *duplex*.

Genus *Eresinopsides* Strand 1911

Archiv für Naturgeschichte 77: 193.

Type-species: *Eresinopsides bichroma* Strand, by original designation.

Head small; eyes glabrous; labial palpi long, second segment oval and laterally compressed, third segment long and slender; antennae moderately long, with fusiform clubs; thorax short and slender; male forelegs, tibia slightly shorter than femur, tarsi unsegmented, clothed beneath with fine spines. Wings. Costa and termen of forewings convex; hind wing oval. R_5 and M_1 arising from a common stem from upper angle of cell; hind wing R_5 stalked on M_1 . Forewing with 11

veins. (Stempffer 1967). Coloration of head, antennae, body and legs similar to *Teriomima*.

Genitalia, male. Uncus may be bifid and strongly bifurcate; tegumen narrow; no subunci; two large lobes similar to special processes, with long spines; valves oblong, distally falcate with pointed apex; aedoeagus long, obliquely truncate at apex; not excised ventrally.

The characters of the genus are described in Aurivillius 1925, Stempffer 1967, Hemming 1967, and Eliot 1973.

KEY TO THE SPECIES OF THE GENUS *ERESINOPSIDES*

1. Uncus with large distal fork .. *bichroma* (Fig. 103)
- Uncus without large distal fork .. *bamptoni* (Fig. 114)

Eresinopsides bichroma Strand 1911

Eresinopsides bichroma Strand 1911, *Archiv für Naturgeschichte* **77**: 194.

Type locality: [Tanzania]: “Amani”.

= *staphyla* Hulstaert 1924 (as sp. of *Pseuderesia*), *Revue de Zoologie et de Botanique Africaines* **12**: 117. [Democratic Republic of Congo]: “Région de Sasa”.

Figures: Adult figured in D’Abrera 1980, and Larsen 1991. Male genitalia figured in Stempffer 1967.

Eresinopsides bichroma bichroma Strand 1911, Figs 29, 30, 103.

Eresinopsides bichroma Strand 1911, *Archiv für Naturgeschichte* **77**: 194.

Type locality: [Tanzania]: “Amani”.

Distribution: North-eastern Tanzania: Usambara Mts; Pugu Hills; Kimboza Forest; Nguru Mts (Turiani) (Kielland 1990); Kitchi Hills.

Eresinopsides bichroma jefferyi Stempffer 1950

Eresinopsides bichroma jefferyi Stempffer 1950, *Revue Française d’Entomologie* **17**: 135.

Type locality: [Kenya]: “Kilifi”.

Distribution: Kenya coast.

Habitat: Dense coastal and lowland forest.

Habits: Adults flutter on forest margins.

Genitalia, male (Fig. 103). Uncus bifid and pointed; tegumen narrow; two large rounded lobes, attached to tegumen as are special processes, with long spines; valves oblong, distally falcate with pointed apex; aedoeagus long, obliquely truncate at apex; not excised ventrally.

Eresinopsides bamptoni sp. n., Figs 67-70, 114.

Description

Head: black; frons black with two ochreous lines laterally; labial palpi with brown and white scales, third joint white-tipped. Antennae: black, ringed with white, club black with whitish-ochre tip. Tarsi: black, ringed with white. Thorax: black with ochreous scales and hairs.

Male. Forewing length: 10.5 mm (n=1). Antenna-wing ratio: 0.48 (n=1). Wings. Forewing rounded, costa convex, termen slightly convex; hind wing rounded. Upper side. Forewing dark brown with slight orange scaling along inner margin; cilia dark brown. Hind wing: orange-yellow patch along inner margin, incorporating cell, angled centrally; remainder of wing dark brown; cilia dark brown, very faintly flecked with greyish-white. Underside. Forewing: orange-yellow, marginal line dark brown, subapical band broad and long fuscous outlined with dark fuscous, fuscous markings along costa and in cell. Hind wing: orange-yellow; six transverse rows of yellowish-grey spots outlined with fuscous; first row basal, second crossing the cell, third medial, fourth discal and dark brown at inner margin and at anal margin, fifth postdiscal, large and dark brown, sixth consisting of a series of triangular sub-marginal orange markings; marginal line dark brown; cilia dark brown faintly chequered with greyish-white.

Female. Forewing length: 11 mm (n=1). Antenna-wing ratio: 0.44 (n=1). Female larger than male, wing shape more rounded; orange ground colour slightly paler than in male; markings consisting of moderately wide border, reducing along forewing costa and marginal bands narrowing to tornus.

Genitalia, male (Fig. 114). Uncus surmounted by small pointed projection; tegumen narrow; two large curved and acuminate structures, attached to tegumen as are special processes, with long spines; valves oblong, distally falcate with pointed apex; aedoeagus long, obliquely truncate at apex; not excised ventrally.

Material Examined

Types. Holotype ♂, TANZANIA: Rondo Plateau, 850 m, 20.ii.2002 (T.C.E. Congdon). Paratypes 18♂ 1♀, as holotype but 5.ii.2002 - 2.iii.2002 (T.C.E. Congdon, I. Bampton, P. Walwanda). Holotype and paratypes in ABRI, Kenya; paratype in Henning Collection.

Distribution: Recorded from Rondo Plateau, 850 m, south-eastern Tanzania.

Habitat: Occurs in lowland forest. Originally discovered flying beneath the canopy of a huge *Brachystegia* specimen on the slopes below the plateau. During subsequent visits it was found in the canopy above the road on top of the plateau.

Remarks: Differs from *E. bichroma* in its smaller size, reduced orange markings on the forewing and more extensive orange patch on the hind wing. Underside

more darkly and brightly marked, the dark markings being much larger. The male genitalia differ from those of *E. bichroma* in the absence of the strongly bifurcate distal projection on the uncus; the special processes are twice as large size, strongly curved and acuminate.

Etymology: Named for Ivan Bampton who collected the first specimen and for his numerous contributions to the study of Afrotropical butterflies.

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PLATE 1

Teriomima Genus Group – genera, species groups and subgroups:

Teriomima (Teriomima) subpunctata male: 1a upper side, 1b underside.

Teriomima (Chrystina) micra male: 2a upper side, 2b underside.

Euthecta cooksoni male: 3a upper side, 3b underside.

Baliochila aslanga male: 4a upper side, 4b underside.

PLATE 2

Teriomima Genus Group – genera, species groups and subgroups:

Baliochila minima male: 5a upper side, 5b underside.

Baliochila congdoni male: 6a upper side, 6b underside.

Baliochila lequeuxi male: 7a upper side, 7b underside.

Baliochila nyasae male: 8a upper side, 8b underside.

PLATE 3

Teriomima Genus Group – genera, species groups and subgroups:

Baliochila nguru male: 9a upper side, 9b underside.

Baliochila fragilis male: 10a upper side, 10b underside.

Baliochila stygia male: Holotype 11 upper side.

Baliochila fusca female: paratype 12 upper side.

Baliochila woodi male: 13a upper side, 13b underside.

PLATE 4

Teriomima Genus Group – genera, species groups and subgroups:

Baliochila singularis male: 14a upper side, 14b underside.

Cnodontes pallida male: 15a upper side, 15b underside.

Eresinopsides bichroma bichroma male: 16a upper side, 16b underside.

PLATE 5

Teriomima (Chrystina) micra, type species of subgenus *Chrystina* subgen. n. male genitalia: 17.

Teriomima (Chrystina) parva beylissi subsp. n., male holotype genitalia: 18.

Congdonia duplex sp. n, hind wing venation of *Congdonia* gen. n.: 19.

Euthecta cooksoni cordeiroi sp. n. male holotype genitalia: 20.

PLATE 6

Teriomima Genus Group species:

Teriomima (Teriomima) williami sp. n. male holotype: 21 upper side, 22 underside.

Teriomima (Teriomima) williami sp. n. female paratype: 23 upper side, 24 underside.

Teriomima (Chrystina) parva beylissi subsp. n. male holotype: 25 upper side, 26 underside.

Teriomima (Chrystina) parva beylissi subsp. n. female paratype: 27 upper side, 28 underside.

PLATE 7

Euthecta cooksoni cordeiroi sp. n. male holotype: 29 upper side, 30 underside.

Euthecta cooksoni cordeiroi sp. n. female paratype: 31 upper side, 32 underside.

Euthecta cooksoni subgrisea subsp. n. male holotype: 33 upper side, 34 underside.

Euthecta cooksoni marginata subsp. n. male holotype: 35 upper side, 36 underside.

PLATE 8

Teriomima Genus Group species:

Baliochila latimarginata rondoensis subsp. n. male holotype: 37 upper side, 38 underside.

Baliochila latimarginata rondoensis subsp. n. female paratype: 39 upper side, 40 underside.

Baliochila confusa sp. n. male holotype: 41 upper side, 42 underside.

Baliochila confusa sp. n. female paratype: 43 upper side, 44 underside.

PLATE 9

Teriomima Genus Group species:

Baliochila collinsi sp. n. male holotype: 45 upper side, 46 underside.

Baliochila collinsi sp. n. female paratype: 47 upper side, 48 underside.

Baliochila megadentata sp.n. male holotype: 49 upper side, 50 underside.

Baliochila megadentata sp.n. female paratype: 51 upper side, 52 underside.

PLATE 10

Teriomima Genus Group species:

Baliochila citrina sp. n. male holotype: 53 upper side, 54 underside.

Baliochila citrina sp. n. female paratype: 55 upper side, 56 underside.

Baliochila abri sp. n. male holotype: 57 upper side, 58 underside.

Baliochila abri sp. n. female paratype: 59 upper side, 60 underside.

PLATE 11

Teriomima Genus Group species:

Baliochila fusca sp. n. male holotype: 61 upper side, 62 underside.

Baliochila mwanihanae stat. n. male: 63 upper side, 64 underside.

Congdonia duplex sp. n. male holotype: 65 upper side, 66 underside.

Eresinopsides bamptoni sp. n. male holotype: 67 upper side, 68 underside.
Eresinopsides bamptoni sp. n. female paratype: 69 upper side, 70 underside.

Figures 1

Teriomima Genus Group species, male genitalia previously published in Stempffer & Bennett 1953, Stempffer 1967 or in original description.

Fig. 78 is annotated: u = uncus; a = apophysis; s = special processes; te = tegumen; v = valves; ad = aedoeagus; an = anellus.

Teriomima (Teriomima) subpunctata: 71. *Teriomima (Teriomima) puella*: 72.
Teriomima (Teriomima) puellaris: 73. *Teriomima (Teriomima) zuluana*: 74.
Teriomima (Chrystina) micra: 75. *Teriomima (Chrystina) parva*: 76. *Euthecta cooksoni*: 77. *Baliochila aslanga*: 78. *Baliochila barnesi*: 79. *Baliochila neavei*: 80. *Baliochila hildegarda*: 81. *Baliochila dubiosa*: 82.

Figures 2

Teriomima Genus Group species, male genitalia previously published in Stempffer & Bennett 1953, Stempffer 1967 or in original description. No's 88 & 91 are new drawings from type material.

Baliochila minima: 83. *Baliochila amanica*: 84. *Baliochila latimarginata latimarginata*: 85. *Baliochila lipara*: 86. *Baliochila congdoni*: 87. *Baliochila warrengashi*: 88. *Baliochila lequeuxi*: 89. *Baliochila nyasae*: 90. *Baliochila nguru*: 91. *Baliochila fragilis*: 92. *Baliochila pseudofragilis*: 93.

Figures 3

Teriomima Genus Group species, male genitalia previously published in Stempffer and Bennett 1953, Stempffer 1967 or in original description.

Fig. 98 is annotated: t = tegumen processes; al = anellus lobes.

Baliochila stygia: 94. *Baliochila woodi*: 95. *Baliochila pringlei*: 96. *Baliochila singularis*: 97. *Cnodontes pallida*: 98. *Cnodontes penningtoni*: 99. *Cnodontes penningtoni* = *vansoni*; 100. *Cnodontes vansomereni*: 101. *Cnodontes bouyeri*: 102. *Eresinopsides bichroma bichroma*: 103.

Figures 4

Teriomima Genus Group species, male genitalia.

Teriomima (Teriomima) williamsi sp. n.: 104 paratype. *Baliochila latimarginata rondoensis* subsp. n.: 105 holotype. *Baliochila confusa* sp. n.: 106 holotype. *Baliochila collinsi* sp. n.: 107 holotype.

Figures 5

Teriomima Genus Group species, male genitalia.

Baliochila megadentata sp. n.: 108 holotype. *Baliochila citrina* sp. n.: 109 holotype.

Baliochila abri sp. n.: 110 holotype. *Baliochila fusca* sp. n.: 111 holotype.

Figures 6

Teriomima Genus Group species, male genitalia.

Baliochila mwanihanae stat. n.: 112. *Congdonia duplex* sp. n.: 113 holotype.

Eresinopsides bamptoni sp. n.: 114 holotype. Wing venation, *Congdonia* gen. n. 115.

Plate 12

Forest species distribution, Fig. 116.

- Eastern African montane forest habitats (World Conservation Monitoring Centre).
- The species of the genus *Cnodontes* are excluded as they are entirely woodland species; *Baliochila* woodland localities are included.
- No of species and subspecies in the *Teriomima* Genus Group recorded = s + number of taxa.
- Type localities of species and subspecies in the *Teriomima* Genus Group [locality] = t + number of taxa.

1. Central coast, KwaZulu-Natal, South Africa [Pinetown] (s1, t1).
2. 'Zululand', KwaZulu-Natal, South Africa [Hluhluwe] (s3, t1).
3. Subcoastal Mozambique [Dondo] (s4, t2).
4. Interior Mozambique [Vunduzi River] (s3, t1).
5. Eastern Border, Zimbabwe [Mineni Valley] (s3, t1).
6. Central woodland of Zimbabwe [Bromley] (s1, t1).
7. Mlanje Mountain, southern Malawi (s6, t4).
8. Zambia, Shaba - DRC, western Tanzania and northern Malawi (s3, t0).
9. Rondo Plateau, Tanzania (s8, t6).
10. Mafia Island, Tanzania (s1, t1).
11. Udzungwe Mountains, Tanzania (s5, t3).
12. Uluguru Mountains, Tanzania (s5, t1).
13. Nguru Mountains, Tanzania (s8, t2).
14. Usambara Mountains, Tanzania (s11, t5).
15. Northern Tanzania interior [Arusha] (s2, t1).
16. Coastal Tanzania (s6, t1).
17. Southern Kenya coast [Mombasa, Kilifi] (s11, t4).
18. Central Kenya coast [Witu, Tana River] (s3, t3).
19. Central Kenya [Nairobi, Meru] (s5, t2).
20. Western Kenya [South Kavirondo] (s1, t1).

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