

Mimacraea gelinia georgia ♂ **r**

Udzungwa National Park

CHECKLIST OF BUTTERFLIES

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Introduction

This checklist follows the arrangement of Ackery, Smith and Vane-Wright in *Carcasson's African Butterflies*, 1995.

For every butterfly the species and if appropriate the subspecies name is given in full, followed by a brief description and details of habitat and behaviour. Entries are based on Kielland's Butterflies of Tanzania, 1990 and our own observations. No butterfly checklist is complete and final. More species will be added in the course of time.

The Udzungwa National Park contains a variety of habitat types. The butterfly fauna is therefore rich and varied. Over 400 species are present. From the point of view of the butterflies, the most important habitat types are:

• Low and medium altitude rain forest.

Eastern Arc forests, mainly east facing.

• Highland forest.

Undifferentiated Afromontane, elfin mist forest.

• Highland grassland.

E.g. on Luhombero Mt., but also above Ruaha Gorge.

• Hot, dry woodland and thorn scrub.

Ruaha Gorge.

• *Brachystegia* woodland. East of Luhomero Mountain.

Checklist

HESPERIIDAE

(The Skippers)

Coeliades anchises Gerstaeker, 1871. Underside grey-brown, with a white band containing a single black spot. Habitat woodland at all elevations. Larval foodplants Marsdenia angolensis (Asclepiadaceae) and Triapsis leendertziae (Malpighiaceae). All the skippers roll or fold a leaf of their foodplant to make a shelter in which they hide.

Coeliades chalybe Westwood, 1852. Blackish, with strongly blue-green iridescence. Deep forest from 700 to 1800m. Foodplant *Cynanchum* (Asclepiadaceae).

Coeliades forestan Stoll, 1782. The 'Striped Policeman'. Similar to anchises, but lacking the black spot. Woodland and forest at all altitudes. Larval foodplants mainly Combretaceae and Papilionaceae.

Coeliades libeon Druce, 1875. Smaller than the other species. Upperside and underside uniformly dull brown. Woodland and forests up to 1900m. Foodplants *Drypetes* (Euphorbiaceae) and *Millettia* (Papilionaceae).

CoeliadespisistratusFabricius,1793.Underside white band containing three or four
black spots. FoodplantsMarsdenia(Asclepiadaceae),Acridocarpus(Malpighiaceae)andIndigofera(Papilionaceae).

Coeliades sejuncta Mabille & Vuillot, 1891. Underside hindwing discal band rather narrow, yellowish, lower half orange containing two rows of black spots. Forests up to 2100m. Larval foodplant Acridocarpus zanzibaricum (Malpigiaceae).

Celaenorrhinus bettoni Butler, 1902. A small species. Forewing orange band broken into spots, and upperside generally with orange hairs on a brown background.

Celaenorrhinus galenus Fabricius, 1793 ssp *biseriatus* Butler, 1888. Dark brown with an orange forewing discal band and orange spots. Forests at all altitudes.

Celaenorrhinus sanjeensis Kielland, 1990. Black with a white forewing discal band. The

band is slightly convex and with even sides. Three small apical spots in a straight line. Only known from forests above Sanje village.

Celaenorrhinus zanqua Evans, 1937. Similar to *sanjeensis*, but forewing band irregular, and apical spots in a curved line. Forests below 1750m. Larvae feed on *Brillantaisia* (Acanthaceae).

Tagiades flesus Fabricius, 1781. Brown, underside of hindwing silvery white with black spots near costa. Common in forest and heavy woodland, settling on the undersides of leaves. Foodplants *Dioscorea* (Dioscoriaceae) and *Grewia* (Tiliaceae). Also possibly on *Cola* (Sterculiaceae).

Eagris nottoana Wallengren, 1857. Male brown on both surfaces, forewing with two or three clear forewing spots. Female paler, forewing with a row of squareish clear spots, and with a whitish hindwing underside. Forests at all elevations. Local. Foodplants Scutia (Rhamnaceae), Dombeya (Sterculiaceae) and Grewia (Tiliaceae).

Eagris sabadius Gray, 1832 ssp *astoria* Holland, 1896. Warm brown with irregular hyaline forewing spots. Forests above 800m. Larvae on *Grewia* (Tiliaceae) and *Rhus* (Anacardiaceae), *Dombeya* (Sterculiaceae).

Calleagris jamesoni Sharpe. Underside brown, forewing with black edged white spots, hindwing with a white discal patch with white spots on the outer edge. Woodland and forest margins up to 1600m.

Eretis herewardi Riley, 1921 ssp *rotundimacula* Evans, 1937. Dark brown basal areas, paler outer areas. A single round white discal spot and a row of very small white apical spots. Rare, but recorded from Nyumbenitu in the Udzungwas and probably also at Luhombero.

Eretis lugens Rogenhofer, 1891. Vary dark brown with three very small pale apical spots. Forests and heavy woodland above 800m. Larvae on Acanthaceae.

Eretis melania Mabille, 1891. Similar to *lugens* but paler. Forests up to 2000m.

Sarangesa maculata Mabille, 1891. Mottled blackish brown, forewing with a prominent hyaline discal spot. Forests up to 1700m.

Sarangesa motozi Wallengren, 1857. Pale brown with bold darker brown areas. Very common outside of forests up to 2000m. Foodplants Acanthaceae.

Sarangesa seineri Strand, 1909 ssp *tanga* Evans, 1937. Dark brown with blackish marbling, forewing with a few clear spots, hindwing with an irregular edge. Woodland and rocky hills.

Caprona pilaana Wallengren 1857. Forewing apex sharply angled, hindwing margin irregular and angled. Upperside brown, boldly marked with blackish and whitish. Woodland. Foodplants *Dombeya* (Sterculiaceae) and *Grewia* (Tiliaceae).

Netrobalane canopus Trimen, 1864. Forewing sharply angled, white with brown basal and apical areas. Riverine thickets etc. up to 1700m. Foodplants *Grewia* (Tiliaceae), Dombeya (Sterculiaceae) and Pavonia (Malvaceae).

Leucochitonea amneris Rebel & Rogenhofer, 1894. Like a small Pierid. Creamy white with a broad black forewing apex containing white spots, and a black hindwing margin. Ruaha gorge.

Abantis paradisea Butler, 1870. Black with creamy spots and patches on both wings. Woodland up to 1500m. Larvae are on *Hibiscus* (Malvaceae), *Annona* (Annonaceae) and *Cola* (Sterculiaceae).

Abantis venosa Trimen 1889. Upperside brown with blackish veins, forewing with hyaline spots. Underside hindwing whitish with a brown border. Woodland. Foodplant Pterocarpus tinctorius and probably Pterocarpus angolensis (Papilionaceae) (Mninga).

Abantis zambesiaca Westwood, 1874. Similar to paradisea but black areas strongly washed with green. Habitat similar to paradisea.

Spialia depauperata Strand, 1911. The species of *Spialia* are difficult to tell apart. They are small skippers, dark brown with yellowish

white spots, a more or less well developed discal band on the hindwing and a chequered margin. Underside much paler. In *depauperata* the underside discal band is well developed. Woodland and open country between 1000 and 2000m.

Spialia diomus Hopffer, 1855. Underside discal band narrower than in *depauperata*, and curved. From sea level to 2000m outside of forests. Larvae on *Hermannia* (Sterculiaceae) and *Pavonia* (Malvaceae).

Spialia dromus Plotz, 1884. Underside discal band of irregular width. Woodland and forest margins up to 2000m. Foodplants *Triumfetta* spp (Tiliaceae).

Spialia spio Linnaeus, 1764. Underside hindwing discal band does not reach costa. Present everywhere except closed forest. Larvae mainly on Malvaceae but also on *Hermannia* (Sterculiaceae).

Gomalia elma Trimen, 1862. Upperside greybrown and blackish, hindwing with a pale discal bar. Forests up to 2200m. Larvae on Abutilon (Malyaceae).

Metisella decipiens Butler, 1896. The several species of Metisella are dark brown with orange markings. The present species has an irregularly shaped forewing discal band and a few small spots on the hindwing. Forest glades and edges from 1100 to 1900m.

Metisella sp n. (Kielland p. 237). Similar to *medea* but smaller, forewing less boldly spotted with yellow, hindwing more boldly. Forest margins, etc. at high altitudes.

Metisella medea Evans, 1937. Brown with round orange spots on both wings. Open habitats at high altitudes.

Metisella midas Butler, 1894. Both wings with large round orange spots. Marshy areas and open grass down to 900m.

Metisella abdeli Kruger 1928. Forewing median spots more or less joined into a band. Hindwing with a bold discal spot and several small submarginal ones. Forests and open habitats down to 800m.

Metisella trisignatus Neave, 1904. Forewing with three submarginal orange spots only. A montane species, above 1800m.

Metisella willemi Wallengren, 1857. Above dark brown, forewing with pale markings, underside hindwing with pale yellow streaks and brown lines. Woodland up to 2000m. Larvae feed on grasses.

Ampittia capenas Hewitson, 1868. Upperside similar to *Metisella*, but underside yellow with brown spots. Woodland up to 1700m.

Ampittia parva Aurivillius, 1925. Upperside brown with orange post discal bands on both wings, underside yellow with brown forewing markings. Lowland forests and along rivers.

Kedestes wallengreni Trimen, 1883 ssp fenestratus Butler, 1893. Above dull brown, forewing sharply angled, and with discal hyaline spots. Underside paler, hindwing with thin whitish streaks along the veins. Woodlands and highland grasslands.

Gorgyra bibulus Riley, 1929. Upperside black with very small white discal spots. Underside dark brown. Forests up to 2000m. Larval foodplant *Drypetes gerrardii* (Euphorbiaceae).

Gorgyra diva Evans, 1937. A very small dull brown skipper, with a white tip to the abdomen. Forests and heavy woodland up to 1500m.

Gorgyra johnstoni Butler, 1894. Paler than *bibulus* and with more white spots. Tiny white dots on hindwing. Woodland and forest margins up to 1800m.

Gorgyra subfacatus Mabille, 1890 ssp vosseleri Grunberg, 1907. Larger than johnstoni. Underside reddish brown with black and white spots. Forest from 900 to 1200m at Mwanihana.

Gorgyra subflavidus Holland, 1896. Underside of hindwing yellow with brown marginal markings. Up to 1200m at Mwanihana. Larvae found on ?Khaya (Meliaceae) at Sanje Falls.

Teniorhinus harona Westwood, 1881. Above orange with brown margins and forewing cell. Hindwing underside with yellow and pale brown rays. Very common in woodland.

Teniorhinus herilus Hopffer, 1855. Upperside brown with orange markings. Forests above Sanje, up to 1250m.

Pardaleodes incerta Snellen, 1872. Bright orange with bold black margins and markings. A common forest species up to 2000m.

Xanthodisca vibius Hewitson, 1878. Above dark brown with a large median orange patch. Forests up to 1700m. Larvae on *Aframomum* (Zingiberaceae).

Acada biseriata Mabille, 1893. Similar to Pardaleodes incerta, but smaller, and hindwing orange area reduced to a discal bar. Common in Brachystegia woodland, the larvae feeding on Brachystegia (Caesalpiniaceae).

Acleros mackenii Trimen, 1868. Upperside blackish, underside variable, greyish with pale striations and forewing with white discal markings. A common woodland species. Larvae are on *Rhus* (Anacardiaceae) and *Acridocarpus* (Malphigiaceae).

Acleros ploetzi Mabille, 1890. Similar to mackenii with which it flies, but outer half of hindwing underside very dark, sharply distinct from the pale inner half.

Paracleros biguttulus Mabille, 1889. Another very small skipper. Upperside blackish with a white hindwing margin, underside dark brown finely speckled with white scales. Forests up to 1300m.

Semalea arela Mabille, 1891. Blackish above, slightly paler below. Forests and heavy woodland up to 2000m. Larvae on Aframomum (Zingiberaceae).

Semalea pulvina Plotz, 1879. Differs from *arela* in having a well marked sex brand on the hindwing. Similar habitats to *arela* but less common. Larval foodplants *Aframomum* (Zingiberaceae).

Andronymus caesar Fabricius, 1793 ssp philander Hopffer, 1855. Has a white discal bar on hindwing, forewing with discal and subapical spots. Common in woodland at intermediate altitudes. Larvae are on Sapindaceae and Caesalpiniaceae.

Andronymus gander Evans, 1947. Very similar to caesar, but forewing lower cell streak as long as spot in space 2, while in caesar it is usually shorter. Often has an additional white spot in hindwing space 3. Forests above Sanje village.

Andronymus neander Plotz, 1884. Wings more angular than the other species, and white hindwing area much reduced. Very common in heavy woodland, etc. and often migratory.

Chondrolepis niveicornis Plotz, 1883. Antennae white, underside of wings red-brown. In damp places along streams in grassland, woodland and forest. Larvae are on *Imperata cylindrica* (Gramineae).

Chondrolepis obscurior de Jong, 1986. Underside dark brown. Grassy places in highland forest.

Chondrolepis similis De Jong, 1986. White antennae. Above dark brown, forewing with hyaline spots. Underside paler, a wedge-shaped median band on hindwing, and forewing costa rusty red-brown. This species was believed to be confined to forests in Mufindi, but has now been found along ridge-tops at high altitudes near Luhomero Mountain.

Chondrolepis telisignata Butler, 1896. Underside hindwing with a pale median arrowshaped mark. Montane scrub and forest margins down to about 1500m.

Zophopetes dysmephila Trimen, 1868. Large. Club of antenna white. Forewing discal area with three small hyaline spots. Found wherever the larval foodplants grow. These are *Phoenix reclinata* and *Raphia farinifera* (Palmae).

Zophopetes nobilior Holland, 1896. Similar to *dysmephila* but larger and with a purple tinge. Four forewing hyaline spots. Along rivers wherever the larval foodplant *Raphia farinifera* grows.

Artitropa erinnys Trimen, 1862. Above brown, forewing with small white hyaline spots, hindwing with an orange brown triangular discal patch. Underside hindwing with a squareish white median patch. Forests up to about 1500m. Larvae are on *Dracaena* spp. (Agavaceae).

Artitropa milleri Riley, 1925. Upperside hindwing orange brown area much larger than in *erinnys*, underside hindwing pale area irregular in shape and silvery white. Montane forests down to about 1300m. Larvae are on *Dracaena laxissima* (Agavaceae).

Artitropa reducta Aurivillius, 1925. Underside hindwing pale area reaches costa. Uncommon, but found above Sanje up to around 1200m.

Larvae have been found on *Dracaena* sp. aff. *usambarensis* (Agavaceae).

Monza punctata Aurivillius, 1910. Dark brown above and below, forewing with two hyaline discal spots, three subapical dots. Forests and heavy woodland up to about 1700m.

Fresna nyassae Hewitson, 1878. Underside pale purple or yellowish, with black spots. Woodland. Foodplant *Albizia* sp. (Caesalpiniaceae).

Platylesches galesa Hewitson, 1877. Above dark brown, forewing with small hyaline spots, hindwing with a row of small yellowish discal spots. Abdomen with a white tip. Common in forest and woodland. Larvae of this and the other species of *Platylesches* feed on *Parinari* spp. (Chrysobalanaceae). Reports of other foodplants, mainly grasses, are now known to be erroneous.

Platylesches moritili Wallengren, 1857. Paler than *galesa*. Underside with a pale brown median area. A common species of woodland and savannah up to about 2000m.

Platylesches panga Evans, 1937. Palpi white below. Forests at intermediate elevations.

Platylesches picanini Holland, 1894. Underside hindwing with a bold pale discal bar, reaching costa. Fairly common in forests up to 2000m.

Platylesches rasta Evans, 1937. Discal bar of hindwing underside does not reach costa. Forests up to 2300m.

Zenonia zeno Trimen, 1864. Above brown with extensive orange markings. Whole of forewing cell, and hindwing discal band orange. Common in all habitats and at all altitudes. Larvae feed on grasses.

Pelopidas mathias Fabricius, 1798. Above brown with white forewing spots, and a thin black forewing brand. Grassy woodlands.

Pelopidas thrax Hubner, 1821 ssp *inconspicua* Bertolini, 1850. Darker than *mathias*, and forewing brand white. Woodland up to 1500m.

Borbo borbonica Boisduval, 1833. The numerous *Borbo* species are small brown skippers with small spots on the forewings.

The present species has three black edged white spots on the hindwing underside. Woodland at all altitudes.

Borbo detecta Trimen, 1893. Smaller and paler than *borbonica*. Spots on hindwing underside very small. Woodlands.

Borbo fanta Evans, 1937 ssp **barnesi** Evans, 1949. Larger than borbonica, and with more rounded wings. Underside spots almost obsolete. Woodlands up to 1700m.

Borbo fatuellus Hopffer, 1855. Small and dark brown. Underside with a purplish wash, and no spots. Very common in woodland and light forest.

Borbo gemella Mabille, 1884. Similar to *fanta*, but much smaller. Woodland and savannah. Larval foodplants grasses.

Borbo holtzi Plotz, 1883. Similar to *gemella*. Underside hindwing with a straight row of small dark spots. Another species of woodland and open habitats.

Borbo lugens Hopffer, 1855. Dark brown, and unmarked on both surfaces. A forest species, similar to several dark species of *Gorgyra*, but with more rounded wings.

Borbo micans Holland, 1896. Orange brown with ochreous spots. Swampy areas.

Gegenes hottentota Latreille, 1824. Mid brown and without spots. Male forewing with a large black androconial patch. Woodland and open country up to about 1800m.

Gegenes niso Linnaeus, 1764 ssp *brevicornis* Plotz, 1884. Similar to *hottentota*, but lacking the black androconial patch. Woodland and grassland at all elevations.

Gegenes pumilio Hoffmansegg, 1804. Dark brown, forewing darker towards base. A widespread species, from Africa through the Middle East to India, common in woodland and savannah.

PAPILIONIDAE

(The Swallowtails)

Papilio constantinus constantinus Ward, 1871. A tailed species. Blackish brown with pale yellow bands and submarginal spots on both wings. Lowland forests and forest margins. Larval foodplant *Vepris glomerata* (Rutaceae).

Papilio dardanus Brown, 1776 ssp *tibullus* Kirby 1880. A tailed species. Male yellow with black borders. Female polymorphic, a mimic of several distasteful Danaid species. Low and medium altitude forests. Larvae feed on *Teclea* spp (Rutaceae).

Papilio demodocus Esper 1798. The common citrus swallowtail. Tailless, and with black and yellow spots. Larvae feed on *Clausena anisata* and other Rutaceae including cultivated citrus.

Papilio desmondi van Someren, 1960 ssp **usambarensis** Kocak 1980. Tailless. Black with a broad blue band across both wings.

Throughout the forests. Larvae are on *Toddalia* asiatica (Rutaceae).

Papilio echerioides Trimen, 1868 ssp **pseudowertheri** Kielland 1990. Tailless. Male black, with a white band on the hindwing and white bars on the forewing. The female is a mimic of *Amauris* sp (Danaidae). Forests at low to medium altitudes. Larvae are on *Clausena anisata* (Rutaceae).

Papilio fulleborni Karsch 1900. Male similar to that of *echerioides*, but white band on hindwing wider, and white bars on forewing shorter. Females very difficult to tell apart. Highland forest from about 1600m. Larvae on *Clausena anisata* (Rutaceae).

Papilio hornimani Distant, 1879 ssp mwanihanae Kielland, 1987. The only tailed swallowtail in Tanzania with blue bands across both wings. Male with silvery spots on the underside. The female has narrower, duller blue bands, and the underside spots are larger and dull yellowish. Low to medium altitude forests, males often found drinking on damp sand in the river above Sanje Falls. The female is very seldom seen. Subspecies mwanihanae is endemic to the Udzungwa National Park.

Papilio mackinnoni Sharpe, 1891. Similar to constantinus, but without submarginal spots, and the yellow band across both wings is placed nearer to the outer margin. High to medium altitudes. Larval foodplant *Clausena anisata* (Rutaceae).

Papilio nireus Linnaeus, 1758 ssp **lyaeus** Doubleday 1845. Similar to *desmondi*, but with narrower blue bands. Common in forests and woodland up to about 1800m. Larvae on several Rutaceae.

Papilio ophidicephalus Oberthur, 1878. A very large, tailed swallowtail. Black with a yellow band and spots on both wings. Common in forests at low to medium altitudes. Larvae on *Clausena anisata* and cultivated *Citrus*.

Papilio pelodurus Butler 1895 ssp vesper Le Cerf, 1924. A tailed species. Black, with a yellow band across both wings, and bold yellow spots. Forests at high to medium altitudes. Larvae feed on Cryptocarya liebertiana and Ocotea usambarensis (Lauraceae).

Papilio phorcas Cramer, 1775 ssp **nyikanus** Rothschild and Jordan 1903. Black, with a broad green band across both wings. Common in high to medium altitude forests. Larvae feed on *Teclea* spp (Rutaceae).

Papilio thuraui Karsch, 1900. Black, with a submarginal row of blue spots on both wings. Highland forests. Larvae are on *Toddalia asiatica* (Rutaceae). A local and rare species, only found in southern Tanzania and northern Malawi.

Graphium angolanus Goeze, 1779. Tailless. Black and white. Common in all habitats except forest up to about 1800m. Larvae feed on *Annona* spp (Annonaceae).

Graphium antheus Cramer, 1779. Long, thin curved tails. Pale green and black. There are three wavy green lines in the forewing cell. A woodland species of low to medium elevations.

Larvae feed on *Uvariodendron kirkii* (Annonaceae).

Graphium colonna Ward, 1873. A splendid black swordtail, with narrow green bands on both wings and a prominent red spot at the base of the hindwing. Low to medium altitudes in forest and heavy woodland. Larvae are on *Uvaria kirkii* (Annonaceae).

Graphium kirbyi Hewitson, 1872. A black swordtail with a bold whitish band across both wings. Lowland forests. Larvae on Uvariodendron kirkii (Annonaceae). Uncommon and local.

Graphium leonidas Fabricius, 1775. Tailless. Black, with pale blue bands and spots. Some red markings on the underside. Woodland and forest at low to medium altitudes. Larvae are on *Uvaria acuminata* and other Annonaceae.

Graphium philonoe Ward 1873. Tailless. Black with white markings. Smaller than *angolanus*, and lacking a red spot at the base of the hindwing. Forest and heavy woodland at low altitudes. Larvae on *Uvaria acuminata* (Annonaceae).

Graphium policenes Cramer, 1775. A black and blue swordtail with wide, straight bars in the forewing cell. Forests. Larvae feed on soft shoots and leaves of various Annonaceae.

Graphium polistratus Grose-Smith, 1889. Green bars in forewing cell slightly wavy, narrower than in *policenes*, and paler. Low altitude forests.

Graphium porthaon Hewitson, 1865. A black swordtail with pale greenish cream markings. Lowland forests. Larvae are on *Uvaria kirkii*. An uncommon species.

PIERIDAE

(The Whites)

Catopsilia florella Fabricius, 1775. The common African Migrant. There are two

colour forms, a pale greenish yellow or a deep butter yellow. Common in all habitats, often visiting flowers. Males congregate on damp sand. This is the species which migrates in swarms sometimes hundreds of kilometres in extent. The larvae feed on *Cassia* species (Caesalpiniaceae).

Colias electo Linnaeus, 1763 ssp pseudohecate Berger, 1940. Rich orange yellow with a black forewing apex and wing borders. Highland grassland. Larvae on Trifolium spp (Papilionaceae) (clover).

Eurema brigitta Cramer, 1770. A small yellow butterfly with black forewing apex. Woodland and montane grassland. The several species of Eurema which occur in the Park are hard to separate on external characters. Larvae feed on soft growing leaves of Albizia, Cassia and other Legumes. Males congregate on damp sand.

Eurema desjardinsi Boisduval 1833 ssp *marshalli* Butler, 1897. Forests, woodland and open habitats at all altitudes.

Eurema floricola Boisduval, 1833. Lowland forests.

Eurema hapale Mabille, 1882. Paler than the other species. In open areas in forests, and in grasslands at all altitudes up to about 2000m.

Eurema hecabe Linnaeus, 1758 ssp *solifera* Butler 1875. Woodlands, grasslands and forest margins up to about 2200m.

Eurema mandarinula Holland, 1892. Montane grassland and forest.

Eurema regularis Butler, 1876. Woodland and forest margins up to about 1800m.

Eurema senegalensis Boisduval, 1833. Larger than the other species. Abundant in forests up to 2000m.

Eurema upembana Berger, 1981. A larger butterfly than *mandarinula*, and in the same habitats.

Pinacopteryx eriphia Godart, 1819. Blackish brown with yellowish bands and spots. Common in dry habitats up to about 1500m. Larval foodplants are Capparidaceae.

Nepheronia argia Fabricius, 1775 ssp **mhondana** Suffert 1904. A large species. Male white with a black apical patch. Females have

a greenish yellow hindwing. Forests and heavy woodland up to about 1800m. Kielland lists *Cassipourea* (Rhizophoraceae), *Ritchiea* (Capparidaceae), *Hippocratea* (Hippocrataceae) and Salicia (Celastraceae) as foodplants.

Nepheronia thalassina Boisduval, 1836. Smaller than *argia*. Male upperside pale blue. Habitats similar to those of *argia*. Common.

Eronia cleodora Hubner, 1823 ssp *dilatata* Butler, 1888. Wing margins with black borders of varying width. Heavy woodland up to 1200m. Foodplants Capparidaceae.

Eronia leda Boisduval, 1847. Yellow on both wings. Male with a large reddish apical patch. Woodlands, savannah and forest margins to about 2000m. Larval foodplants Salvadora persica (Salvadoraceae) and Capparis spp (Capparidaceae).

Colotis antevippe Boisduval, 1836 ssp gavissa Wallengren, 1857. Male white with a bright red apical patch, black margins and a black spot in the forewing cell, and in the rains a black bar along the inner margin of the forewing. In the female the apical area is black with red spots, and both wings are heavily marked with brown. All the Colotis species inhabit woodland and open formations, and all their larvae feed on various species of Capparidaceae.

Colotis aurigineus Butler, 1883. Orange red with black margins and black veins. Some white at base of forewing. Woodland and open formations up to 2200m.

Colotis aurora Cramer, 1775 ssp dissociatus
Butler, 1817. Smaller than auxo Lucas and pale yellow to white. Dry bush country to 1700m.

Colotis auxo Lucas, 1852 ssp *incretus* Butler 1881. Yellower than *aurora* and larger, flying with it in the Ruaha Gorge.

Colotis celimene Lucas, 1852. Forewing apical patch dark crimson. Ruaha Gorge. A fast flying species, males territorial in behaviour.

Colotis danae Fabricius, 1775 ssp *pseudacaste* Butler, 1876. Males with a large deep red apical patch. Dry woodland to 1700m

Colotis eris Klug, 1829. Most of forewing black, apical area brown with paler spots. Very common in dry country to above 2000m.

Colotis evagore Klug, 1829 ssp *antigone* Boisduval 1836. Very small, and very variable. Also very common in dry country to 1800m.

Colotis evenina Wallengren, 1857 ssp *sipylus* Swinhoe, 1884. The male has an orange apical patch. Coastal woodland inland to the Eastern Arc, up to 1950m.

Colotis evippe Linnaeus, 1764 ssp omphale Godart, 1819. Forewing more rounded than evenina, and more heavily marked with black. Woodland, open grassland and savannah to 1900m.

Colotis hildebrandti Staudinger, 1885. Apical half of male forewing orange. Open woodland. Common in Ruaha Gorge.

Colotis ione Godart, 1819. The male has purple spots in the black apical patch. Ruaha Gorge.

Colotis pallene Hopffer, 1855. A black spot in forewing cell and a yellow apical patch on the underside. Ruaha Gorge.

Colotis protomedia Klug, 1829. Bright yellow with brown apex. Marginal bands spotted yellow. Ruaha Gorge.

Colotis regina Trimen, 1863. A large species. The male has a magenta forewing apex. Woodland.

Colotis vestalis Butler, 1876 ssp castalis Staudinger, 1885. Distal third of forewing black with white spots. Ruaha Gorge. Common.

Belenois aurota Fabricius, 1793. White, with dark brown borders containing white spots, brown veins, and a wedge of brown in the forewing cell. Common in all habitats although less so in forests.

Belenois creona Cramer, 1776 ssp **severina** Stoll, 1781. A small species, white with broad black borders containing small white spots. Habits similar to those of *aurota*.

Belenois gidica Godart, 1819. Variable. Migratory, and therefore in all habitats. Larvae on *Salvadora persica* (Salvadoraceae) in addition to Capparidaceae.

Belenois margaritacea Sharpe, 1891 ssp *intermedia* Kielland, 1985. Bluish white with very broad black borders, even more extensive in the female. A forest species, from 1000 to 1500m.

Belenois thysa Hopffer, 1855. Underside of hindwing and forewing apex orange, base of forewing crimson. Woodland and savannah at all altitudes.

Belenois zochalia Boisduval, 1836 ssp agrippinides Holland, 1896. Underside with two dark lines in hindwing cell. All habitats. Larval foodplants as for gidica.

Pontia helice Linnaeus, 1764 ssp **johnstoni** Crowley, 1887. Underside with greenish veins. Open montane bush and grasslands. Larvae on *Reseda pruinosa* and *Caylusea abyssinica* (Resedaceae) and various Cruciferae (Brassicaceae).

Dixeia pigea Boisduval, 1836. Underside yellowish. Woodland and forest margins to about 2000m.

Appias epaphia Cramer, 1779 ssp *contracta* Butler, 1888. Smaller than *A. sabina* (below). Males white with black forewing apex. Forest and woodland to about 2000m. Larvae are on a wide range of Capparidaceae.

Appias lasti Grose-Smith 1889. Both sexes with an orange hindwing. Lowland forest to 800m. Foodplants *Drypetes* and *Phyllanthus* (Euphorbiaceae) and *Maerua* and *Capparis* (Capparidaceae).

Appias phaola Doubleday, 1847 ssp *isokani* Grose-Smith, 1889. Underside of hindwing greenish yellow. Local in lowland forest up to about 400m, reaching the foothills of the Udzungwa range and the Ruaha valley.

Appias sabina Felder & Felder, 1865 ssp phoebe Butler, 1900. White with a strongly dentate inner edge to a black border. Forests at all altitudes. Larvae on *Drypetes* and *Phyllanthus* (Euphorbiaceae) and *Boscia* (Capparidaceae).

Mylothris agathina Cramer, 1779. Underside of hindwing orange, forewing with large reddish basal area. Woodland and forest margins at all elevations. Larvae on Loranthaceae.

Mylothris bernice Hewitson, 1866. Forewing costa broadly black. Swamps, usually at high altitudes, where the larval foodplant *Polygonum pulchrum* (Polygonaceae) grows. Seasonally abundant after the rains in June and July.

Mylothris citrina Aurivillius, 1898. Males with citrus yellow forewing, females ochreous. Forest. An uncommon species which occurs at Mwanihana.

Mylothris crawshayi Butler, 1896. Male forewing white with black costa, apex and outer margin. This is less dentate than in *sagala*, below. Hindwing yellow. The female is similar but darker. High altitude forests. Larvae are on Loranthaceae.

Mylothris ruppellii Koch, 1865 ssp rhodesiana Riley, 1921. A large species with reddish basal areas on both wings. Heavy woodland and forest margins to 2000m. Foodplants Loranthaceae.

Mylothris sagala Grose-Smith, 1886. Differs from *crawshayi*, as detailed above. High level forests, down to about 1000m. Larvae are often found on *Erianthemum schelei* (Loranthaceae).

Mylothris similis Lathy, 1906 ssp *dollmani* Riley, 1921. Male creamy white with a pink suffusion basally, a black forewing apex and

black spots at vein ends. Females orange. Submontane forests. Larvae on Loranthaceae.

Mylothris talboti Berger, 1952. A small species with reduced black markings. Upperside white with a yellowish suffusion, darker towards the base. A Tanzania endemic, in medium altitude forests. Larvae on Loranthaceae.

Mylothris yulei Butler, 1896 ssp *ertli* Suffert, 1904. Similar to *talboti*, but yellowish in basal areas only. Forests up to 900m. Larvae on Loranthaceae.

Leptosia alcesta Stoll, 1784 ssp *inalcesta* Bernardi, 1959. A small, feebly flying white with rounded wings and black borders. Forests at low to medium altitudes. Larval foodplant *Capparis* sp (Capparidaceae).

ACRAEIDAE

(The Acraeas)

*Acraea acara Hewitson, 1865. A large species. Deep red with black markings. Woodland and forests to 1800m. Foodplants Passifloraceae, but the closely related A. zetes Linnaeus 1758, is also reported from Hydnocarpus (Flacourtiaceae) and Barleria (Acanthaceae).

Acraea acrita Hewitson, 1865. Ground colour bright red-orange with five black spots on forewing, hindwing with many spots and a black marginal band containing orange lunules. A woodland species. Larvae on Adenia (Passifloraceae).

Acraea adrasta Weymer, 1892. Black, with a wide orange band across both wings (white in the female). Uncommon. Forests up to 1250m above Sanje.

Acraea aganice Hewitson, 1852 ssp montana Butler, 1888. Bands much narrower than in adrasta, and paler. Forests up to 2150m. Larvae on Basananthe, Adenia, and Passiflora (Passifloraceae).

*Acraea anemosa Hewitson, 1865. Ground colour red, hindwing with a broad black

marginal border, forewing with heavy black marking at cell end. Woodland. Larvae are reported on Passifloraceae, and on *Vitis* (Vitaceae) and less probably on grasses.

*Acraea caecilia Fabricius, 1781 ssp pudora Aurivillius, 1910. Ground colour brownish red, hindwing margin and forewing apex blackish, both wings with small black spots. Dry thorn country in the Ruaha valley. Larvae on Adenia (Passifloraceae).

Acraea cepheus Linnaeus, 1758 ssp bergeriana Pierre, 1979. A small species, bright orange-red with bold black apex and margins, and heavy black spots. Hindwing underside pale with black markings. Forests.

Acraea egina Cramer, 1775. Red with black margins and spots. Woodland up to about 1800m. Larvae on *Adenia* (Passifloraceae).

Acraea epaea Cramer, 1779 ssp epitellus Staudinger, 1896. Black with brownish apical bar, lower median area and most of hindwing. Forests at low to medium altitudes, Common.

Acraea insignis Distant, 1880. Ground colour red. Apical half of forewing semi transparent, lightly dusted black, hindwing margin black, and a large black basal patch. Abundant in forest and woodland at all altitudes. Kielland (1990) lists several foodplants, and while it is not impossible that this species uses them occasionally, insignis larvae wander some distance from their foodplant to pupate. We have only found them on Kiggelaria africana (Flacourtiaceae) and Passiflora spp (Passifloraceae).

Acraea machequena Grose-Smith, 1887. Ground colour pale orange. Forewing without spots, distal half semi transparent, blackish. Hindwing heavily spotted and with a row of marginal spots. Forests at all elevations.

Acraea natalica Boisduval, 1847. Variable. Ground colour usually orange. Forewing apex and hindwing margin broadly black, both wings heavily spotted. Woodland and savannah up to 2000m. Foodplants Adenia and Passiflora (Passifloraceae), Vitis (Vitaceae) and Oncoba (Flacourtiaceae).

Acraea neobule Doubleday, 1847. Outer half of forewing hyaline, becoming orange towards base. Hindwing orange with a black marginal band containing small orange spots. Both wings spotted black. Foodplants Passifloraceae, Flacourtiaceae and *Hybanthus* (Violaceae).

Acraea oncaea Hopffer, 1855. Similar to neobule but whole of forewing orange. Female with a white subapical forewing band. Woodland up to 2000m. Larvae reported on Vitis (Vitaceae), Adenia (Passifloraceae), Oncoba (Flacourtiaceae) and Wormskioldia (Turneraceae).

Acraea petraea Boisduval, 1847. Similar to cepheus but black markings reduced and hindwing underside dark. Low level forests, occasionally up to 1500m. Larvae on Xylotheca tettensis (Flacourtiaceae).

*Acraea pseudolycia Butler, 1874 ssp astrigera Butler, 1899. Similar to anemosa, but with white spots in the black hindwing border. Woodland and open habitats up to 2000m.

Acraea quadricolor Rogenhofer, 1891 ssp itumbana Jordan, 1910. Similar to aganice, but forewing band more jagged. A very variable species. Forests up to 2150m. Larvae on Vitis (Vitaceae) and Adenia (Passifloraceae).

Acraea quirina Fabricius, 1781 ssp rosa Eltringham, 1912. Basal areas of forewing red, rest of forewing and hindwing margin hyaline. Hindwing discal and basal areas red with black spots. Forests up to about 1800m. Foodplants *Rinorea* spp (Violaceae).

Acraea satis Ward, 1871. Forewing apex hyaline, basal areas and hindwing red. An irregular black band across both wings. Low altitude forest above Sanje. Foodplant *Rinorea ilicifolia* (Violaceae).

Acraea scalivittata Butler, 1876 ssp kiellandi Collins, 1990. Dark brown with a yellowish hindwing band and a divided white forewing bar. High altitude forests down to 1750m. Larvae on Adenia (Passifloraceae).

*Acraea utengulensis Thurau, 1903. Clear bright red, with a black forewing apex. Hindwing with a narrow black border containing red spots, and both wings with round black spots. Brachystegia woodland up to 2000m.

Acraea (Actinote) acuta Howarth, 1969. Black with a yellow or orange hindwing discal patch and four yellowish forewing spots. Variable. Montane forest above 1500m. Foodplant Boehmeria (Urticaceae).

Acraea (Actinote) alicia Sharpe, 1890 ssp uzungwae Kielland, 1990. Black with orange median areas on both wings and an orange subapical forewing bar. Underside subbasal black band narrow and lacking red inclusions. Forest and open areas above 1500m.

Acraea (Actinote) anacreon Trimen, 1868 ssp bomba Grose-Smith, 1889. Orange with black borders and spots. Hindwing underside with a black edged orange median band. Woodland and open areas above 1200m. Larvae on Passifloraceae, Turneraceae, Rosaceae and Papilionaceae.

Acraea (Actinote) baxteri Sharpe, 1902. Similar to insignis, but underside hindwing basal areas spotted. Montane forests. Larvae on Urera hypselodendron (Urticaceae).

Acraea (Actinote) cabira Hopffer, 1855. Similar to alicia, but ground colour often yellowish, and underside band includes red spots. Forests up to 2100m. Larvae on Triumfetta and Cephalomma (Tiliaceae).

Acraea (Actinote) conradti Oberthur, 1893. Ground colour red, distal half of forewing black with three white spots in a band, hindwing with a broad black margin. Forests above Sanje.

Acraea (Actinote) egina Cramer, 1775. Forewing red-black with deep black spots and a red patch near inner margin. Hindwing red, basal half densely spotted black, margin black. A common woodland species. Foodplant Adenia (Passifloraceae).

Acraea (Actinote) encedana Pierre, 1976. Only separable from egina on the genitalia. Also a woodland species.

Acraea (Actinote) encedon Linnaeus, 1758. A passable mimic of *Danaus chrysippus* but hindwing with small black spots. Woodland at all but the highest altitudes. Larvae reported from *Commelina* (Commelinaceae).

Acraea (Actinote) eponina Cramer, 1780. A small, very variable species in the bonasia group. Underside of hindwing copiously spotted. Widespread outside of forests up to 2200m. Larvae on Triumfetta (Tiliaceae) Hermannia Sterculiaceae) and Hibiscus (Malvaceae).

Acraea (Actinote) esebria Hewitson, 1861. Like a very small aganice, but forewing band with smooth edges. Common in forests up to 2000m.

Acraea (Actinote) goetzei Thurau, 1903. In the alicia group. Very small. Black basal areas reduced. Underside subbasal band divided in two. Montane habitats. Common. Larvae on Triumfetta (Tiliaceae).

Acraea (Actinote) igola Trimen, 1889. Resembles baxteri, but basal black area replaced with black spots. Forests up to 1200m above Sanje. Larvae on Urera (Urticaceae).

Acraea (Actinote) johnstoni Godman, 1885. Similar to acuta but larger, hindwing pale area with a distinct angle. A common forest species up to 2150m. Larvae on *Laportea*, *Pouzolzia* and *Boehmeria* (Urticaceae).

Acraea (Actinote) pentapolis Ward, 1871 ssp epidica Oberthur, 1893. A large species. Similar to satis, but lacking red on the forewing, and black markings diffuse. Forests, usually up to 1600m. Larvae feed on Myrianthus (Moraceae).

Acraea (Actinote) perenna Doubleday, 1847 ssp thespiro Oberthur, 1893. Another large species. Large with tapering forewings. Apical half of forewing, basal half of hindwing and hindwing margin black. Hindwing margin containing small red spots. Heavy woodland and forest up to 1400m. Larvae on a wide variety of plants including Bridelia (Euphorbiaceae), Adenia (Passifloraceae), Kolobopetalum (Menispermaceae), Mikania (Compositae) and Urera (Urticaceae).

Acraea (Actinote) pharsalus Ward, 1871 ssp pharsaloides Holland, 1892. Similar to perenna, but red on forewing reduced, hindwing margin without red spots. Forests and heavy woodland from 800 to 2000m. Larvae on *Ficus* spp. (Moraceae).

Acraea (Actinote) servona Godart, 1819 ssp orientis Aurivillius, 1904. Forewing with a bar of large hyaline subapical spots, one in cell and another in median area. Hindwing with a large yellow patch. Forests at intermediate altitudes.

Acraea (Actinote) sotikensis Sharpe, 1892. Another species in the *alicia* group, but larger and red (or yellow) areas reduced. Common in forests and open habitats up to 2200m. Larvae on *Triumfetta* (Tiliaceae).

Acraea (Actinote) vuilloti Mabille, 1889. Hindwing red with black spots and a white patch near inner margin. In and around forests at intermediate altitudes. Larvae feed gregariously on *Boehmeria* (Urticaceae).

Pardopsis punctatissima Boisduval, 1833. Small and feebly flying, with rounded wings. Yellowish brown liberally speckled with small spots.

DANAIDAE

(The Monarchs)

Danaus chrysippus Linnaeus, 1758. The common African Monarch. Larvae of all the Danaidae feed on Asclepiadaceae, from which they derive distasteful chemicals which are retained in the adult. They are resistant to crushing, and serve as models for many species of mimics. All habitats at all elevations.

Danaus formosa Godman, 1880. Blackish brown with numerous white markings and an orange red basal area. Forests at all elevations. Occasionally migratory. Larvae on Asclepiadaceae.

Danaus petiverana Doubleday & Hewitson, 1847. Black with many pale blue spots and dashes. Woodland and forest up to 1600m. Foodplants Asclepiadaceae. This species is probably the model for *Graphium leonidas*.

Amauris albimaculata Butler, 1875 ssp latifascia Talbot, 1940. Black with white spots and a wide brownish yellow hindwing band. Differs from echeria in having only two spots in the forewing apex, and from crawshayi in being considerably smaller and with more elongated forewings. Forests above 1000m. Foodplant Tylophora anomala and other Asclepiadaceae.

Amauris crawshayi Butler, 1896. Hindwing band reaching nearer to base than in

albimaculata and *echeria*. Forests at all elevations. Foodplants as for *albimaculata*.

Amauris echeria Stoll, 1790 ssp serica Talbot, 1940. Three white spots in forewing apex. Forests at all elevations. Foodplants various Asclepiadaceae.

Amauris ellioti Butler, 1895 ssp junia Le Cerf, 1920. Four conjoined spots beyond forewing cell, and hindwing band white. Forests above 1100m. Foodplants Asclepiadaceae.

Amauris niavius Linnaeus 1758 ssp dominicanus Trimen, 1879. Black with white markings, including a prominent white subapical band on forewing. Forests, usually at low to medium elevations, but recorded up to 2300m. Foodplants Asclepiadaceae.

Amauris ochlea Boisduval, 1847. Black. Forewing with a large white discal band. Lowland forests up to about 1000m. Foodplants Asclepiadaceae.

Amauris tartarea Mabille, 1876 ssp damoclides Staudinger, 1896. Forewing with two large discal spots, hindwing with a dull white patch. Forests up to about 2000m.

SATYRIDAE

(The Browns)

Gnophodes betsimena Boisduval, 1833 ssp diversa Butler, 1880. A large species. Brown with a wide ochreous forewing band. Heavy woodland and forest up to about 1600m. As with nearly all the Satyridae the larval foodplants are grasses.

Melanitis leda Linnaeus, 1758 ssp *africana* Fruhstorfer, 1908. Forewing with a large black eye-spot with two small white dots. Woodland and forest up to 2000m, but usually lower.

Aphysoneura pigmentaria Karsch, 1894 ssp *uzungwae* Kielland, 1989. Dark brown with complex yellow markings. Montane forests.

Larval foodplants bamboos and *Festuca africana* (Poaceae). A very active species.

Bicyclus angulosus Butler, 1868 ssp **selousi** Trimen, 1895. For detailed descriptions of the various *Bicyclus* spp refer to Kielland 1990, and for illustrations also to D'Abrera 1980. A woodland species.

Bicyclus anyana Butler, 1879. Mainly a woodland species, common everywhere.

Bicyclus campinus Aurivillius, 1901 ssp *ocelligerus* Strand, 1910. Forests, usually at low to medium elevations. Common above Sanje village.

Bicyclus danckelmani Rogenhofer, 1891. Differs from *simulacris*, with which it flies in the Udzungwas, in that the underside hindwing band is more bent. Most common in forests from 800 to 1400m.

Bicyclus ena Hewitson, 1877. Dry woodland.

Bicyclus kiellandi Condamin, 1983. A small species with a very straight distal line on the underside. Very local in grassland near Luhombero Mountain at 1500m. A Tanzania endemic.

Bicyclus safitza Hewitson, 1851. Median line of underside evenly curved. Found in all habitats except heavy forest. Common.

Bicyclus simulacris Kielland, 1990. Forests above 1300m. Another Tanzania endemic species.

Bicyclus uzungwensis Kielland, 1990 Forewing with a bright orange patch. Confined to high altitudes on Luhomero Mountain. This species is only found here, on Nyumbenitu Mt., and on Mafwemiro in the Rubeho Mts..

Henotesia perspicua Trimen, 1873. Similar to *H. simonsii*, but underside discal line more heavily developed. Woodland to 2150m.

Henotesia simonsii Butler, 1877. Underside with very large eye-spots. The dry season form is yellow. Deciduous woodland.

Henotesia ubenica Thurau, 1903 ssp uzungwa Kielland, 1990. Forewing post discal ocellus large, surrounded with orange, and with a small white dot in the centre. Common in submontane grassland at 1500 to 1600m.

Ypthima antennata Van Son, 1955. Antenna with a short knob-like club. Open, rocky montane grassland.

Ypthima granulosa Butler, 1883. A woodland species found at all altitudes.

Ypthima impura Elwes & Edwards, 1893 ssp **paupera** Ungemach, 1932. Larger than related species, and ground colour a richer brown. Woodland.

Ypthima rhodesiana Carcasson, 1961. Has an evenly curved median brown line on hindwing underside. Brachystegia woodland up to 1500m.

Ypthimomorpha itonia Hewitson, 1865. Hindwing with a complete row of ocelli. Favours marshy areas up to about 1800m.

Physcaeneura jacksoni Carcasson, 1961. Upperside creamy white with dark brown costa and distal borders. Underside finely striated. Forest margins and clearings to 1500m. Common above Sanje village.

Physcaeneura pione Godman, 1880. Upperside hind margin of forewing with a brown bar. Woodland and savannah to 1400m.

Neocoenyra heckmanni Thurau, 1903 ssp *uzungwae* Kielland, 1990. Forewing ocellus in a roughly triangular orange patch. Montane to sub-montane grassland down to about 1300m.

Neocoenyra ypthimoides Butler, 1893. Similar to *heckmanni* but with brown not orange round the eye spots. Woodland.

NYMPHALIDAE

(The Brush-footed Butterflies)

Phalanta eurytis Doubleday, 1847. Dark orange with prominent black submarginal lines and spots on both wings. Common in forests. Foodplants Flacourtiaceae and Celastraceae.

Phalanta phalantha Drury, 1773. Paler orange-brown than *euritis*, and black markings reduced. More of a woodland species. Often abundant. Foodplants Flacourtiaceae, Celastraceae and Salicaceae.

*Lachnoptera ayersi Trimen, 1879. Previously treated as a subspecies of *iole* Fabricius, 1871. A large reddish-brown butterfly with a prominent blue patch on the hindwing. Forests up to 2000m. Foodplant *Rawsonia* (Flacourtiaceae).

Issoria baumanni Rebel, 1894 ssp *orientalis* Kielland, 1990. A small butterfly, orange with black borders and spots, and black bars along forewing costa. Along streams in montane grassland and open forest glades. Foodplant *Viola africana* (Violaceae).

Issoria smaragdifera Butler, 1895 ssp *reducta* Carcasson, 1961. Larger than *baumanni*, and black markings stronger. Habitat and foodplant as for *baumanni*.

Hypolimnas anthedon Doubleday, 1845 ssp wahlbergi Wallengren, 1857. Very variable. Forewing with a white subapical bar and a white patch near inner margin, hindwing white with black veins and margin, or forewing with white spots, hindwing median area yellow. Forests at intermediate elevations, larvae on Urticaceae.

Hypolimnas deceptor Trimen, 1873. Smaller than *anthedon*, and white areas reduced. Low altitude forests. Larvae on *Laportea* (Urticaceae).

Hypolimnas misippus Linnaeus, 1764. Male black, forewing with white apical patch and another post medially, hindwing a white median patch. White areas iridescent blue in oblique light. Female a convincing mimic of Danaus chrysippus in all its forms. Very woodland at common in intermediate Larvae elevations. on Portulaca (Portulacaceae) and Asystasia, Justicia (Acanthaceae).

Hypolimnas usambara Ward, 1872. Similar to *anthedon*, but larger and with bold red spots at tornus of hindwing and underside with a red

margin. Lowland forests. One specimen known from above Sanje village.

Salamis anacardii Linnaeus, 1758. Smaller than *parhassus*, and with a large black forewing apex. Open forest, woodland and savannah up to 2200m. Larvae on *Asystasia* (Acanthaceae).

Salamis parhassus Drury, 1782. The 'Mother of Pearl'. Upperside with green, pink and yellow lustre. A very common forest species. Larvae on a wide range of Acanthaceae.

Salamis temora Felder & Felder, 1867 ssp *virescens* Suffert, 1904. Male upperside deep purplish blue, less extensive on the female. Forest and riverine bush up to 1600m. Quite common above Sanje. Larvae on *Brillantaisia* and other Acanthaceae.

Junonia artaxia Hewitson, 1864. Forewing greenish blue with a large black discal patch and white apical markings. Hindwing brown with a prominent red and blue eye-spot, and a smaller one below it. Woodland. Larval foodplant Acanthaceae.

Junonia hierta Fabricius, 1798. Yelloworange and black with a round blue patch in the basal part of hindwing. Woodland and open habitats at all altitudes. Very common. Foodplants Acanthaceae.

Junonia natalica Felder, 1860. Above brown with a discal band. Three post discal white spots. Woodland and savannah at all elevations. Foodplant *Phaulopsis* (Acanthaceae).

Junonia oenone Linnaeus, 1758. Black with white forewing spots. A round blue patch on the hindwing. All habitats except dense forest. Larval foodplants Acanthaceae.

Junonia orithya. Linnaeus, 1758. Hindwing blue much more extensive than in *oenone*. Another open country species, also on Acanthaceae.

Junonia sophia Fabricius, 1793. Small. Yellowish-brown with dark brown markings. Woodland, savannah and forest edges. Larvae on *Sclerochiton* (Acanthaceae).

Junonia terea Drury, 1773 ssp elgiva Hewitson, 1864. Brown with a curved ochreous median band. Forests and heavy woodland. Larval foodplant *Ruellia patulata* (Acanthaceae).

Junonia tugela Trimen, 1879 ssp aurorina Butler, 1893. Forewing falcate, hindwing inner margin produced into a tail. Dark brown with an orange red median band bordered distally with mauve. Underside a dead leaf. A forest butterfly common at all altitudes. Larvae on Plectranthus, Pycnostachys and Englerastrum (Lamiaceae).

Precis actia Distant, 1880. One of a number of highly variable and seasonally dimorphic species inhabiting *Brachystegia* woodland. These can usually be separated by reference to illustrations in the literature. Larvae of *Junonia* are on Lamiaceae and Acanthaceae.

Precis antilope Feisthamel, 1850. Reddish orange with brown margins and markings. Woodland and savannah at all altitudes.

Precis archesia Cramer, 1779. Dark brown with an orange post discal band. Woodland and savannah above 500m. Foodplants Lamiaceae.

Precis ceryne Boisduval, 1847. Brown with a black dotted median band on both wings and submarginal white dots. Woodland and savannah above 800m. Sometimes locally common. Foodplants *Scabiosa* (Dipsacaceae) and *Solenostemon* (=Coleus) (Lamiaceae).

Precis cuama Hewitson, 1864. Similar to *antilope*, but with two white subapical dots on the forewing. Woodland up to 2000m.

Precis octavia Cramer, 1777 ssp **sesamus** Trimen, 1883. The 'Gaudy Commodore' or 'Persian Carpet'. Seasonally dimorphic. Wet season blue with black and red markings, dry season red with black markings. Common in all habitats at all elevations. Foodplants **Plectranthus**, **Solenostemon** and **Pycnostachys** (Lamiaceae).

Precis pelarga Fabricius, 1775. Similar to *actia*, but the black dot in the patch in forewing space 3 is placed distally, whereas in *actia* it is in the middle of the patch. Woodland up to 2000m, often flying with *actia*.

Precis sinuata Plotz, 1880. Dark brown with a red median band, and white spots in forewing apex. More of a woodland species than *tugela*, below.

Catacroptera cloanthe Stoll, 1781. Dark orange with black markings. Looks generally hairy. A common woodland species. Larvae on Acanthaceae.

Cynthia cardui Linnaeus, 1758. The 'Painted Lady'. Above black with extensive pinkish brown markings, white spots in forewing apex. Widespread at all elevations and everywhere except heavy forest. Larvae on Urticaceae, Compositae, Boraginaceae, Malvaceae and Papilionaceae.

Antanartia dimorphica Howarth, 1966. Nearly black, with a transverse orange median band, and two rows of white subapical spots. Usually in highland forest but occasionally coming down as low as 600m. Larval foodplant *Urera* and other Urticaceae.

Antanartia schaeneia Trimen, 1879 ssp dubia Howarth, 1966. Larger than dimorphica, and with longer tails. Larval foodplants *Urera*, and *Laportea* (Urticaceae).

Byblia anvatara Boisduval, 1833 ssp **acheloia** Wallengren, 1857. Orange with black margin, a black submarginal band or spots and a heavy black band along forewing costa. Very common everywhere, often gathering in large numbers on animal dung. Foodplants *Tragia*, *Ricinus* and *Dalechampia* (Euphorbiaceae).

Byblia ilithya Drury, 1770. Similar to *anvatara* but lacking hindwing black band or spots. Habits and foodplants similar, although not as common.

Neptidopsis fulgurata Boisduval, 1833 ssp *platyptera* Rothschild & Jordan, 1903. Like a Neptis, but wing margin indented and white discal band broken up. Present in forests above Sanje.

Neptidopsis ophione Cramer, 1777 ssp **nucleata** Grunberg, 1911. Wing less indented than *fulgurata* and white band more coherent. Common in forest and woodland. Larvae feed on *Tragia* spp. (Euphorbiaceae).

Eurytela dryope Cramer, 1775 ssp angulata Aurivillius, 1898. Upperside dark brown with a broad orange brown post discal band, wider on the hindwing. Forests and heavy woodland. Larval foodplants *Tragia*, *Ricinus* and other Euphorbiaceae.

Eurytela hiarbas Drury, 1770 ssp lita Rothschild & Jordan, 1903. Similar to dryope, but post discal band white, and much narrower. Forests above about 800m. Foodplants as for *hiarbas*.

Sallya amulia Cramer, 1777 ssp *rosa* Hewitson, 1877. Upperside violet blue, female with extensive black markings in apical half of forewing. A woodland species. Larvae on *Maprunea* and *Sapium* (Euphorbiaceae).

Sallya boisduvali Wallengren, 1857. Except for *rosa*, the *Sallya* species found in the Udzungwas are small and with a brown to blackish ground colour. Dark brown, forewing with blackish submarginal spots, small black submarginal spots on hindwing. Foodplants *Sapium*, *Macaranga* (Euphorbiaceae).

Sallya moranti Trimen, 1881. Male uniform dull brown above. Female like that of boisduvali but lacking hindwing submarginal spots. Forests at medium elevations. Foodplants Sapium, Macaranga (Euphorbiaceae).

Sallya pseudotrimeni Kielland, 1985. Upperside with a distinct marginal dark line and prominent submarginal spots. Forests in southern Tanzania up to about 1900m, although usually lower.

Cyrestis camillus Fabricius, 1781. The 'Map Butterfly', so called for the yellow bands and blackish lines of both surfaces. Forests up to 1500m, particularly near rivers. Larval foodplants *Ficus* spp. (Moraceae).

Neptis alta Overlaet, 1955. Underside with more strongly developed white markings than in related species. *Brachystegia* woodland to 2000m.

Neptis aurivillii Schultze, 1913. The Neptis or 'sailors' are a genus of very similar butterflies, black above with a white bar across both wings, curved on the forewing, and usually with crescentic white markings submarginally. Neptis aurivillii has a bright reddish brown underside. Montane forests down to about 800m. Foodplant Macaranga (Euphorbiaceae).

Neptis carcassoni van Son, 1959. A prominent white bar in forewing cell. Spots in forewing spaces 2 and 3 smaller than those on 5 and 6, and cell bar solid to base. Lowland forest up to about 850m.

Neptis goochi Trimen, 1879. similar to *carcassoni*, but spots in forewing spaces 2 and

3 as large as those in 5 and 6, and cell bar diffuse towards base. Forests up to 1500m. Larval foodplant *Dalbergia lactea* (Papilionaceae).

Neptis incongrua Butler, 1896. Similar to *aurivillii*, but underside greyish. Montane forest above 1200m.

Neptis jordani Neave, 1912. Outer margin of forewing band concave, hindwing band narrowing towards inner margin. Wet places up to 1850m. Larvae on *Polygonum strygonum* (Polygonaceae).

Neptis kiriakofi Overlaet, 1955. Like laeta, but white dots in forewing cell are larger. Brachystegia woodland to 2000m. Foodplants are given as Paullinia (Sapindaceae), Pilea (Urticaceae) and Acalypha (Euphorbiaceae), however Neptis species are difficult to determine, and it is possible that these records refer to related species.

Neptis laeta Overlaet, 1955. Small white dots in cell. Differs from serena in the genitalia. Woodland at all elevations. Common. Larvae on Albizia (Mimosaceae), Dalbergia (Papilionaceae) and Acalypha (Euphorbiaceae).

Neptis nina Staudinger, 1896. Very small. Forests at all altitudes.

Neptis ochracea Neave, 1904 ssp *uluguru* Kielland, 1985. Subapical spots reduced or absent. Forests above 850m. Larvae are on brambles (*Rubus* spp., Rosaceae).

Neptis saclava Boisduval, 1833 ssp *marpessa* Hopffer, 1855. Common in all types of habitat. Larvae on Euphorbiaceae, Urticaceae and Combretaceae.

Neptis serena Overlaet, 1955. Similar to *laeta*, but white bands broader and more evenly rounded. More of a forest species.

Neptis trigonophora Butler, 1878. White streak in forewing cell obsolete or nearly so. Low altitude forests.

Harma theobene Doudleday, 1848 ssp blassi Weymer, 1892. Male dark brown with a golden yellow median band and yellow submarginal spots. Female usually paler. Riverine forest in Ruaha valley. Larval foodplants *Rinorea* (Violaceae) and *Lindackeria* (Flacourtiaceae).

Cymothoe aurivillii Staudinger, 1899. tenuifasciae Rydon. Ground colour dark brown. A pale discal patch on both wings, dentate submarginal markings. Female with a white post discal band across both wings, the outer edge of which irregular. Montane forests down to about 1500m. Larvae on Rawsonia (Flacourtiaceae).

*Catuna sikorana Rogenhofer, 1889. Forewing black with a white subapical bar and fine pale lines. Hindwing deep orange with brown markings. Common in forests up to 1200m. Foodplants *Mimusops* and *Englerophytum* (Sapotaceae). (Englerophytum was formerly known as Bequaertiodendron.)

Pseudacraea boisduvali Doubleday, 1845 ssp *trimeni* Butler, 1874. A large and robust mimic of the larger red and black *Acraeas*. Forest and heavy woodland at low to medium altitudes. Larval foodplant *Mimusops* (Sapotaceae).

Pseudacraea deludens Neave, 1912 ssp **morogoro** Kielland, 1990. A very close mimic of *Amauris echeria serica*, but hindwing margin slightly more wavy, and with a dark line dividing hindwing space 2. Highland forest down to about 900m at Sanje. Larvae are on *Chrysophyllum gorungosanum* (Sapotaceae).

Pseudacraea dolomena Hewitson, 1865 ssp **usagarae** Staudinger, 1891. Male bright brick red with a diffuse white band in a black apical patch, black rays along wing veins. In the female the red is replaced with white, cream or pale orange. A forest species very common above Sanje. Larvae are on *Synsepalum subcaudatum* (Sapotaceae).

Pseudacraea eurytus Linnaeus, 1758 ssp **conradti** Oberthur, 1893. A *Bematistes* mimic. Brownish black with a white discal forewing band and wide yellowish hindwing discal patch. A lowland forest species. Larvae feed on *Englerophytum natalense* (Sapotaceae).

Pseudacraea lucretia Cramer, 1775 ssp **expansa** Butler, 1878. Dark brown, forewing with pale discal and post discal broken bands, hindwing with a pale discal area. Very common in forest at low and medium elevations. Larvae on a wide variety of Sapotaceae.

Euptera pluto Ward, 1873 ssp kinugnana Grose-Smith, 1890. A small, active butterfly with a concave forewing margin. Male dark brown with a narrow yellow discal band.

Female like a small *Cymothoe aurivillii*. Common in forest above Sanje. Larvae on *Englerophytum natalense* (Sapotaceae).

Euryphura achlys Hopffer, 1855. Above with complex green and black markings, below like a dead leaf. Often seen along rivers in low to medium altitude forests. Larval foodplant *Trichoscypha uluguruensis* (Anacardiaceae).

Euphaedra neophron Hopffer, 1855. Above violet. Apical half of forewing black, containing a broad ochreous band. Forests and riverine vegetation up to about 1200m. Foodplants *Deinbollia*, *Blighia* (Sapindaceae).

Euphaedra nigrobasalis Joicey & Talbot, 1921. Hindwing ground colour red, with a black marginal band containing small blue spots. Forewing largely black, with a single subapical yellow bar (white in the female). Forests above Sanje.

Euphaedra orientalis Rothschild, 1898. Differs from castanoides in having a wide black hindwing border containing white spots. Lowland forest. Kielland gives *Phoenix* (Palmae) as the larval foodplant, and while this is possible, it seems unlikely given the preferences of other members of the genus.

Euphaedra zaddachi Dewitz, 1879. Similar to *nigrobasalis* but with two white forewing bands. Common in forests up to 1800m. Larval foodplant *Parinari* (Chrysobalanaceae).

Bebearia orientis Karsch, 1895. Pale reddish brown with a short orange subapical band, white in the female. Low to medium altitude forests. Larval foodplants *Phoenix* and *Raphia* palms (Palmae).

Hamanumida daedalus Fabricius, 1775. The 'Guinea fowl'. Grey-brown with many black bordered white dots. Very common flying low in woodland and dry bush country. Larval foodplants *Combretum* spp. (Combretaceae).

Pseudargynnis hegemone Godart, 1819. Orange-brown with black dots and markings, underside with a straight reddish stripe across both wings. Open areas in forest, swampy places generally, from 800 to 1800m. Larval foodplant *Antherotoma naudinii* Melastomataceae.

Aterica galene Brown, 1776 ssp theophanes Hopffer, 1855. Black with two rows of pale spots on forewing, hindwing with a yellowish discal patch. In the female the pale areas may be ochreous. Forests up to about 1800m.

Larvae on *Quisqualis* and *Combretum* (Combretaceae).

Catuna sikorana Rogenhofer, 1889. Forewing black with a white subapical bar and fine pale lines. Hindwing deep orange with brown markings. Common in forests up to 1200m. Foodplants *Mimusops* and *Englerophytum* (Sapotaceae). (Englerophytum was formerly known as Bequaertiodendron.)

Charaxes achaemenes Felder, 1867. The Bush Charaxes. The male is white banded, with sharply angled wings and very long tails. Dry woodland of the Ruaha Gorge. Larval foodplants *Brachystegia*, *Pterocarpus*, *Dalbergia*, etc. (Papilionaceae).

Charaxes acuminatus Thurau, 1903. Wings basal half white with orange to blackish apex and borders. Forewing apex acuminate. Forests from 300m upwards, often near water. Larvae feed on *Allophylus* spp. (Sapindaceae).

Charaxes ansorgei Rothschild, 1897 ssp levicki Poulton, 1933. Similar to Ch. pollux but male with a white patch on the hindwing. Highland forest above 1700m. Larval foodplant Bersama abyssinica (Melianthaceae).

Charaxes aubyni van Someren & Jackson, 1952 ssp *australis* van Someren & Jackson, 1957. A black *Charaxes* of the *ethiocles* group. Male with more evident pale markings on the upperside. Larvae on *Albizia gummifera* and *A. schimperiana* (Mimosaceae).

Charaxes baumanni A small Charaxes, similar in size and underside markings to anticlea, but above black with blue markings. Female brown with a white median band. Larvae are on Pterolobium and Caesalpinia (Caesalpiniaceae) and Acacia (Mimosaceae).

Charaxes bohemani Felder, 1859. Male upperside black with bright blue basal half. Female with white band across forewing. A spectacular species, and very common in *Brachystegia* woodland. The larvae have been reported from a wide variety of pod bearing trees (Legumes).

Charaxes brutus Cramer, 1779 ssp natalensis Staudinger, 1885. Male with a narrow white band across both wings. Underside like that of ansorgei. Another mainly forest species, present at all altitudes. Larvae feed on a wide range of forest trees and lianas.

Charaxes candiope Godart, 1823. The Green Veined Charaxes. Has only one tail. Upperside similar to acuminatus and varanes, but main veins greenish. Forest and heavy woodland. Common. Males often seen on animal droppings. Larvae on Croton (Euphorbiaceae).

Charaxes castor Cramer, 1775 ssp flavifasciatus Butler, 1895. Very large and with long tails. Both sexes with an orange yellow median band across both wings. Mainly a woodland species. Larvae on a wide variety of plants including Afzelia, Brachystegia and Cassia (Caesalpiniaceae).

Charaxes cithaeron Felder, 1858 ssp kennethi Poulton, 1926. Close to xiphares, but male hindwing patch whiter. Forests and heavy woodland at low to medium altitudes. Larvae on Craibia, Dalbergia, Afzelia and Baphia (Legumes) and Trema spp (Ulmaceae).

Charaxes congdoni Collins, 1989. The most common montane black Charaxes in the Udzungwa range. Forests above 1600m. Larvae on Albizia gummifera (Mimosaceae) and occasionally on Scutia myrtina (Rhamnaceae).

Charaxes contrarius van Someren, 1969. Another black *Charaxes*. Underside silvery. Uncommon in riverine forest along the Ruaha.

Charaxes dilutus Rothschild, 1898. Small, green, tailless. Forests and heavy woodland at all elevations. Male often patrols along rivers. Larvae on *Albizia* (Mimosaceae).

Charaxes druceanus Butler, 1869 ssp *proximans* Joicey & Talbot, 1922. Underside with bold silver bands and spots. Common in forest and woodland where its foodplant *Syzygium* (Myrtaceae) grows.

Charaxes ethalion Boisduval, 1847. A black *Charaxes*, male upperside lacking basal sheen, underside satiny. Common in low to medium altitude forests. Larvae on Papilionaceae and Rhamnaceae.

Charaxes fionae Henning, 1977. A black Charaxes, male with two white apical spots, well marked green spots in cell and along costa. The female upperside mimics bohemani. Dry bushland. Uncommon. Larval foodplant Acacia amythethophylla and Entada abyssinica (Mimosaceae).

Charaxes guderiana Dewits, 1879. Male bluish black with large blue-white spots on forewing. The most common *Charaxes* in medium altitude woodland. Larvae mainly on *Brachystegia* (Caesalpiniaceae).

Charaxes howarthi Minig, 1976. A black *Charaxes*. Distal margin of male forewing greenish. Woodland and light forest at medium elevations. Foodplant *Brachystegia spiciformis* (Caesalpiniaceae).

Charaxes jahlusa Trimen, 1862. A very small species, red-brown spots in a black marginal band, underside with silvery markings. Riverine forest in the Ruaha valley. Larvae on *Grewia* (Tiliaceae), Sapindaceae, and various Legumes.

Charaxes jasius Linnaeus, 1767 ssp *saturnus* Butler, 1865. In the same group as *castor*, but appreciably smaller. Widespread, reaching southern Europe, but in the Udzungwas mainly in woodland. Larvae on Caesalpiniaceae.

Charaxes lasti Grose-Smith, 1889 ssp magomberae Kielland, 1984. Red-brown. Underside with a straight bright silver median line across both wings. Lowland forest. Larvae on Julbernardia magnistipulata and Afzelia quanzensis (Caesalpiniaceae).

Charaxes lucyae van Someren, 1975 ssp *mwanihanae* Kielland, 1982. Upperside similar to *druceanus*, underside deep rich redbrown with narrow silvery lines. Local on the ridge on the south side of the Sanje stream, at about 1000m. Larvae on soft young growth of *Syzygium* (Myrtaceae).

Charaxes macclounii Butler, 1895. Similar to *lasti*, but line on underside duller and not as straight. Found wherever there is bamboo (*Arundinaria*, *Oxytenanthera* Gramineae).

Charaxes mccleeryi van Someren, 1972 ssp *iringae* Kielland 1990. A black *Charaxes*, similar to *congdoni*, but larger, with longer tails, and a dentate hindwing margin. Forests on the eastern face of the Udzungwa range. Larvae on *Albizia gummifera* (Mimosaceae).

Charaxes nichetes Grose-Smith, 1883 ssp leoninus Butler, 1895. Upperside reddishbrown with blackish markings. No tails. Woodland. Larvae on *Uapaca* spp. (Euphorbiaceae).

Charaxes penricei Rothschild, 1900. Very similar to tavetensis, but upperside median band further from the margin. Woodland in the Ruaha valley. Uncommon. Larvae on Securidaca longipedunculata (Polygalaceae).

Charaxes phenix Lequeux & Turlin, 1993 ssp daniellae White, 1996. Similar to xiphares but smaller. Female with a cream hindwing band, male with a more extensive white hindwing patch. This species is a Tanzania endemic, and ssp daniellae is only known from the Mwanihana forests.

Charaxes pleione Godart, 1824 ssp *oriens* Plantrou, 1989. Small, dark orange with blackish forewing apex. Female paler. Found at the foot of the forests. Foodplants *Acacia* spp (Mimosaceae).

Charaxes pollux Cramer, 1775 ssp geminus Rothschild, 1900. Upperside reddish-brown with a wide black margin on both wings. Underside as ansorgei. Common in forests at all elevations. Larval foodplant Bersama abyssinica (Melianthaceae).

Charaxes protoclea Feisthamel, 1850 ssp *azota* Hewitson, 1877. Upperside black velvet with a wide orange forewing border. Forest and heavy woodland, up to about 1700m. Common. Foodplants *Afzelia* etc. (Caesalpiniaceae).

Charaxes tavetensis Rothschild, 1894. Close to *penricei* but with upperside median band nearer outer margin. Forest including riverine forest up to about 1500m.

Charaxes varanes Cramer, 1777 ssp *vologeses* Mabille, 1876. Similar to *acuminatus* but paler and lacking an acuminate forewing tip. Mainly a woodland species, but migrates through all habitat types at all elevations. Larval foodplants *Allophylus* and other Sapindaceae.

Charaxes violetta Grose-Smith, 1885 ssp melloni Fox, 1963. Close to cithaeron, but underside with a straight white median line. Forests up to about 1700m. Larvae are on Blighia and Deinbollia (Sapindaceae) and Afzelia and Brachystegia (Caesalpiniaceae).

Charaxes xiphares Cramer, 1781 ssp brevicaudatus Schultze, 1914. Close to cithaeron, but hindwing band bluer and narrower, and tails usually shorter. Highland forest, but descending to 800m or even lower

at Sanje. Larvae are on *Craibia* (Papilionaceae).

Charaxes zoolina Westwood, 1850. Very small. Male with one spatulate tail, female with two. Dry season form mainly brown, wet season green. Larvae climbing Acacia (Mimosaceae).

Euxanthe tiberius Grose-Smith, 1889. A large butterfly with rounded wings and with a large red basal area of the forewing. Often sits motionless for long periods in shady places, only moving when disturbed. Common above Sanje village at around 800 750m. Larvae have been raised on Blighia unijugata (Sapindaceae), but this is probably not its natural foodplant.

Euxanthe wakefieldi Ward, 1873. Lacks the red basal area of *tiberius*. Female with a white discal area of the hindwing. Prefers lower altitudes than *tiberius*. Larvae feed on *Deinbollia* and *Lecaniodiscus* (Sapindaceae).

Apaturopsis cleochares Hewitson, 1873 ssp schultzei Schmidt, 1921. Brown above, with darker markings on forewing. Hindwing elongated. Rare, and might be confused with Libythea labdaca, from which it differs in lacking the long palpi.

LIBYTHEIDAE

(The Snouts)

Libythea labdaca Westwood, 1851 ssp *laius* Trimen 1879. This is the African Snout

butterfly, so called for its very long palpi. Forests to 2000m.

LYCAENIDAE

(Blues, Coppers, Hairstreaks)

Alaena dodomaensis Kielland, 1983. Small butterflies with sharply angled wings and characteristic rapid shallow wing beats. Upperside a dark smoky black with indications of pale markings in the median areas of both wings. Underside heavily reticulated. Rocky wooded hillsides up to about 1250m. Larvae of all Alaena species feed on algae, usually on rocks.

Alaena johanna Sharpe, 1890. Upperside with white median bands on both wings, underside paler than *dodomaensis*. Rocky woodland, usually at 1200 - 1700m.

Alaena picata Sharpe, 1896. Male upperside median markings orange, underside paler, boldly marked. In the female the upperside markings are white. Open rocky areas in forest, up to 1500m.

Pentila pauli Staudinger, 1888 ssp **nyassana** Aurivillius, 1898. Small weakly fluttering butterflies with rounded wings. Above orange with broad clearly defined black borders and a black cell spot on each wing. Forest edges, etc.

up to about 1500m. Pentila larvae feed on algae on trees, down to quite small twigs.

Pentila rogersi Druce, 1907 ssp **parapetreia** Rebel, 1908. Smaller and darker than *pauli*, and a lowland forest species, present above Sanje.

Pentila tropicalis Boisduval, 1847 ssp **mombasae** Grose-Smith and Kirby, 1889. Similar to *pauli*, but apical half of forewing dark, inner edge of dark area diffuse, and both wings with plentiful black spots. Lowland forests up to about 900m.

Ornipholidotos peucetia Hewitson, 1866 ssp *peuceda* Grose-Smith, 1889. Semi translucent white. Broad black borders on both wings and a white bar in the black forewing apex. Woodland and open areas in forest up to about 1500m. Larvae feed on algae on trees.

Ornipholidotos nguru is similar but the apical white bar is conjoined with the rest of the forewing area. It has not been found in the Udzungwas, but may well occur, high up under the forest canopy at about 1400m.

Mimacraea gelinia Oberthur, 1892 ssp georgia Collins. Large. Apical half of forewing black, containing a white subapical bar and a white or yellowish patch near inner angle. Hindwing with a broad black margin. Rest of both wings a rich orange red. Males bask on sunlit trunks of dominant forest trees in the afternoons, at about 1100m above Sanje. Females seldom seen. Larvae eat algae on trees.

Mimacraea marshalli Trimen, 1898. Looks like a miniature *Danaus chrysippus*, with which it possibly has a mimetic association. Woodland up to about 1500m. Larvae of other species have been raised on algae on tree trunks (not lichens as usually stated).

Teriomima puella Kirby, 1887. Yellow. Forewing with a broad black apex, underside of hindwing spotted black. Forest edges etc. up to about 1000m.

Teriomima puellaris A single specimen, male, was taken in woodland below Lulanda Forest, Mufindi District. It is possible that this species will be found in similar habitat in the valley between Luhombero and Mwanihana Mountains.

Teriomima subpunctata Kirby, 1887. Similar to *puella* but ground colour white, and underside spots smaller and more numerous. Forests up to about 1200m.

Baliochila abri Henning 2004 Similar to the previous species, but smaller, and orange areas paler. Hindwing orange area reduced to a small patch below costa. Underside ground colour greyish. Habits similar to *B. megadenta*.

Baliochila hildegarda Kirby, 1887. Orange areas much extended compared with other species present in the Park. A *Brachystegia* woodland species.

Baliochila mwanihanae Congdon, Kielland & Collins, 1998. (Described as ssp of *B woodi* Riley.) Male forewing black, sometimes with orange scaling post discally near inner margin. Upper half of hindwing orange, remainder black. Female with broad black margins and forewing apex, remainder pale orange. Males are territorial, patrolling open sites near forest ridges above Sanje at about 1000m. Females seldom seen. *Baliochila* larvae eat algae on trees and branches

Baliochila megadenta Henning 2004 Male above black, an orange discal patch on forewing, widest at inner margin and two small orange spots along costa. Basal half of hindwing orange. Underside forewing orange patch reaching costa, remainder of both wings grey-brown with orange spots. In the female the orange areas are more extensive. It is found at 1100m above Sanje in March, early in the mornings in sunlit clearings.

Aslauga purpurascens Holland, 1890. Forewing apex acuminate, hindwing produced at inner angle. Upperside brown with purple wash in oblique light, underside brown with a darker median line. Woodland and occasionally forest at medium elevations. Larvae feed on colonies of membracids (leaf hoppers).

Spalgis lemolea Druce, 1890. White, forewing costa, apex and outer margin black. Underside with many small brown spots. Common in woodland and forest up to 1800m. Larvae eat scale insects, membracids and aphids.

Lachnocnema pseudobibulus Libert, 1996. 'Woolly-legs'. Small brown butterflies with silvery markings on the underside hindwing. Body and legs conspicuously woolly, presumably as a defence against the ants guarding the colonies of scale insects and aphids on which the larvae feed, and amongst which the butterfly lays its eggs..

Myrina silenus Fabricius, 1775 ssp ficedula Trimen, 1879. A single long robust hindwing tail. Forewing distal half suffused ochreous, basal half of both wings bright blue. All habitats. Larvae are on various Ficus spp (figs) (Moraceae).

Aphnaeus erikssoni Trimen, 1891 ssp rex Aurivillius, 1909. Brachystegia woodland up to 1800m. Larvae live with ants on *Brachystegia*, Julbernardia and Burkea (Caesalpiniaceae).

Spindasis apelles Oberthur, 1878. Similar to *mozambica* but yellow markings much reduced and red bands bolder. Woodland and open areas up to 1100m. Larvae feed on *Smilax* (Smilacaceae) in association with ants.

Spindasis mozambica Bertolini, 1850. Above, forewing black with a yellow V-shaped marking in the apical half, and a yellow spot in cell. A blue patch basally near inner margin. Hindwing blue with a broad black margin. Underside yellow crossed with red bands and

with black spots basally. Woodland and highland grasslands to over 2000m. Foodplants said to be *Medicago* and *Vigna* (Papilionaceae).

Spindasis nyassae Butler, 1884. Larger than the last two species. Blue areas of forewing more extensive, and underside bands much narrower. Woodland and open habitats up to around 1800m. Larvae feed on various Legumes.

Spindasis victoriae Butler, 1884. Smaller than *nyassae*, underside paler, and basal spots larger. Woodland and open habitats from 900 to 2000m. Larval foodplant *Acacia* spp (Mimosaceae).

Lipaphnaeus aderna Plotz, 1880 ssp *spindasoides* Aurivillius, 1916. Male blue with orange at the hindwing anal angle. Female ochreous with brown borders on the forewing. Forests to 1200m. Foodplant not known, but the related *L. loxura* Rebel, 1914 lives with ants on *Maesa* spp (Myrsinaceae).

Chloroselas pseudozeritis Trimen, 1873 ssp *tytleri* Riley, 1932. A very small butterfly with iridescent patches on the upper side, silvery spots underside. Found wherever there are *Acacia* spp (Mimosaceae), the larval foodplants.

Axiocerses amanga Westwood, 1881. Hindwing red. Forewing black with lower median area red. Underside duller brownish red. Woodland up to 2000m. Larvae are on Ximenia (Olacaceae).

Axiocerses kiellandi Henning & Henning, 1996. Male forewing black, with or without some red near inner margin. Hindwing red with black along costa. Female red with a broad black marginal band on forewing, a row of black spots on hindwing. Common along ridges above Sanje.

Axiocerses punicea Grose-Smith, 1889. Forewing acuminate. Male above black with a deep red median patch on forewing and lower half of hindwing. Female ochreous, forewing with black in cell and a broad black apex and outer margin. Common on ridges above Sanje. Larvae feed on Cassia spp (Caesalpiniaceae) in association with several species of ant.

Axiocerses tjoane Wallengren, 1857. Male above red, Forewing apex and outer margin black, and black spots in discal area. Female

like that of *kiellandi*, but forewing marginal band narrower. Woodland and light forest up to 1700m. Larvae feed on *Brachystegia*, *Julbernardia*, etc. (Caesalpiniaceae).

Aloeides aranda Wallengren, 1857. Above ochreous, a broad dark brown band along forewing costa, apex and outer margin, continued on apex of hindwing. Underside forewing with a few slivery spots. Highland grassland, found in August after grass burning.

Epamera alienus Trimen, 1888. Forewing margin concave. Above shining deep blue with an extensive black forewing apex. Underside greyish brown with a black post discal line on both wings and a black spot in forewing cell, sometimes extending to costa. Woodland from 1000 to 2000m. Larval foodplants Helixanthera, Oncocalyx, Agelanthus, Oliverella and Englerina (Loranthaceae).

Epamera australis Stevenson, 1937. Above shining blue, forewing apical area extensively black, inner edge of black area evenly rounded. Underside dull grey with a thin submarginal line. Woodland at intermediate altitudes. Larvae on a very wide variety of Loranthaceae.

Epamera bakeri Riley, 1928. Upperside bright blue with a black forewing apex. Underside white with a faint dark submarginal line and a red tornal spot. Uncommon in *Brachystegia* woodland. Larvae feed on *Tapinanthus dependens* (Loranthaceae).

Epamera congdoni Kielland, 1985. Hindwing with three tails. Upperside forewing black with a large blue discal patch extending to base. Hindwing blue with a wide black marginal band containing a red spot near the anal angle. Underside white with broad red bands, three on forewing, four on hindwing. Highland forest down to about 1600m. Larvae feed mainly on *Englerina* and *Agelanthus* (Loranthaceae).

Epamera dubiosa Stempffer & Bennett, 1959. Similar to *congdoni*, but hindwing black band narrow and without a red spot, underside hindwing outer band reduced to black spots. Highland forest down to about 1800m. Larval foodplants *Phragmanthera*, *Oedina* and *Erianthemum* (Loranthaceae).

Epamera mermis Druce, 1896. Hindwing with two tails. Upperside pale blue, forewing apical half black, inner edge of which irregular. Underside white with thin black submarginal and post discal lines. Forest up to about

1500m. Foodplants *Helixanthera*, *Oncella*, and *Agelanthus* (Loranthaceae).

Epamera mimosae Trimen, 1874 ssp rhodosense Stempffer and Bennett, 1959. Upperside mid blue, apex of forewing extensively black. Underside pale grey-brown, a paler post discal band outlined with dark brown lines, irregular on inside. Woodland up to about 1500m. Foodplants *Plicosepalus* spp (Loranthaceae).

Epamera nasissii Riley, 1928. Blue area of forewing much reduced. Underside similar to *congdoni* but with submarginal row of black spots on both wings. All habitats at all altitudes. Larvae on a wide variety of Loranthaceae, but mainly *Englerina* and *Agelanthus*.

Epamera sidus Trimen, 1864. Underside pale brownish grey with a dark post median band on forewing and two bands on hindwing. Woodland and forest from 900 to 2000m. Foodplants *Englerina* and *Agelanthus* (Loranthaceae).

Epamera tajoraca Walker, 1870 ssp *ertli* Aurivillius, 1916. Similar to *mimosae* but a darker blue, underside lines bolder and with light and dark patches. Woodland and thorn bush up to about 1500m. Larvae mainly on *Plicosepalus* (Loranthaceae).

Epamera violacea Riley, 1928. Underside with two dark lines and a dark streak in the forewing cell. Woodland up to 2000m. Larvae on *Globimetula*, *Tapinanthus*, *Phragmanthera* and *Helixanthera* (Loranthaceae), usually on the flowers.

Iolaphilus trimeni Wallengren, 1875. Larger. Underside silvery white with an indistinct submarginal line on the hindwing. Woodland. Larvae on *Globimetula* and *Tapinanthus* (Loranthaceae).

Aphniolaus pallene Wallengren, 1857. Quite unmistakable, rich yellow with a dark forewing apex, underside with dark transverse lines. Woodland up to about 1500m. Larvae are on *Ximenia* (Olacaceae).

Argiolaus lalos Druce, 1896. Similar to maritimus but usually smaller, and lacking a line on forewing underside. Lowland forest up to about 1200m. Larvae on *Phragmanthera* and *Erianthemum*.

Argiolaus maritimus Stempffer & Bennett, 1958 ssp usambara Stempffer, 1961. Underside with a red-brown post discal line on both wings. Montane forests down to 800m. Larvae on Oedina, Phragmanthera and Erianthemum (Loranthaceae).

Argiolaus ndolae Stempffer & Bennett, 1958. Very similar to A. silarus, but may be distinguished in the hand by the dull brown underside of the antennae. Larvae are on the same foodplants and the two species fly together. The egg has much smaller indentations, the young larvae are brown not green, and the genitalia of the adults are completely different.

Argiolaus silarus Druce, 1885. Similar to lalos but forewing blue area more extensive and hindwing underside line straighter. Habitats similar to those of trimeni, foodplants Phragmanthera and Erianthemum (Loranthaceae).

Pseudiolaus poultoni Riley, 1928. Underside with straight brown post discal and submarginal lines on hindwing, curved on forewing and with a short streak at end of cell. From arid bush to light forest at low altitudes (up to 700m). Larvae are on *Englerina*, *Agelanthus* and *Helixanthera* (Loranthaceae).

Stugeta bowkeri Trimen, 1864. Upperside blue. Apical half of forewing black, enclosing three small white patches. Hindwing apex black. Underside an intricate web of brown lines and patches on a paler ground. Woodland. Larval foodplants *Ximenia* (Olacaceae), *Viscum* (Viscaceae) and a wide range of Loranthaceae.

Hypolycaena amanica Stempffer, 1951. Long tails. Upperside deep iridescent purple. Underside markings similar to *Pseudiolaus poultoni*, but post discal line on hindwing interrupted. Forests from 800 to 1300m.

Hypolycaena auricostalis Butler, 1897. Upperside brown, with orange lunules at hindwing anal angle. Basal half of costa golden. Underside brown with irregular darker lines post discally and submarginally. In most habitats but more frequently in montane grassland.

Hypolycaena buxtoni Hewitson, 1874. Larger than *amanica*, and hindwing underside post discal line straight. Female upperside forewing black with a large white median area, hindwing

white with dark post discal and submarginal lines. Heavy woodland and forest up to 1500m. Foodplants *Tricalysia* and *Pavetta* (Rubiaceae) and *Ouratea* (Ochnaceae).

Hypolycaena coecula Hopffer, 1855. Above brilliant violet blue with a black forewing apex. Underside pale brown with bold red bars. Woodland. Foodplant Olax obtusifolia (Olacaceae).

Hypolycaena philippus Fabricius, 1793. Upperside iridescent purple, underside like that of auricostalis but paler. Woodland up to 2000m. Larvae on flowers and fruit of Kraussia (Rubiaceae) and Ximenia (Olacaceae), and on Maytenus (Celastraceae).

Hypolycaena spurcus Talbot, 1929. Similar to *buxtoni*, but male a paler blue, and forewing with a greyish androconial patch. Female white areas greatly reduced. More of a woodland and montane grassland species than *buxtoni*.

Leptomyrina hirundo Wallengren, 1857. A small brown butterfly with a single rather long tail on the hindwing and a conspicuous eye spot at the inner angle of the forewing. Found with its foodplant *Kalanchoe* sp. (Crassulaceae) in steep rocky places above Sanje.

Gonatomyrina gorgias Stoll, 1790. Lacks a hindwing tail, and has two eye spots at inner angle of forewing, several on hindwing margin. Open or wooded rocky slopes. Foodplants Crassulaceae.

Pilodeudorix caerulea Druce, 1890. A thin hindwing tail. Above shining blue, forewing costa, apex and outer margin brown, and a large dark blue discal androconial patch. Hindwing costa brown. Forest and woodland up to 2000m.

Pilodeudorix rodgersi Kielland, 1985. Above blackish, blue in oblique light, with a narrow line of iridescent blue scales along hindwing outer margin. Below with straight bold darker bands. Female above brown with a small diffuse ochreous area on the forewing discal area. A rare species, found from 1100 to 1650m above Sanje.

Pilodeudorix zeloides Butler, 1901. Forewing dull blackish, blue seen from the side, hindwing iridescent blue. Open habitats from 800 to 2000m. Larvae are on *Parinari curatellifolia* (Chrysobalanaceae).

Pilodeudorix sp. Similar to *zela*, a western species. Male above dark blue-black. Hindwing veins 1 and 2, and outer margin with a thin scaling of iridescent blue. Female above dark brown with a slight blue wash towards base. (In *zela* there is iridescence along the male hindwing costa, and the underside is a duller brown. Underside of female with narrower bands than *zela*.) Found near the river above Sanje at 800 to 1000m.

Virachola antalus Hopffer, 1855. Male upperside warm coppery brown. Woodland. Larvae eat seeds of Legumes.

Virachola dariaves Hewitson, 1877. Male forewing blackish, hindwing red with a narrow black margin and dark basal area. Woodland up to about 900m, but found above Sanje. Larvae in pods of *Brachystegia* (Caesalpiniaceae).

Virachola dinomenes Grose-Smith, 1887. Male above red with a black forewing apex. A single specimen taken above Sanje.

Virachola jacksoni Talbot, 1935. Looking like a small *Epamera* species, but with only one tail. Woodland and light forest up to 1600m. Larvae on Loranthaceae.

Virachola lorisona Hewitson, 1862. Male above forewing black with a small red discal patch. Hindwing red with a black margin. Female with a larger forewing patch, which may be anything from white to orange, hindwing brown, distal half usually of the same paler colour. Woodland and forest margins up to 1900m. Larvae burrow into the fruits of Rubiaceae, including cultivated coffee.

Virachola magda Gifford, 1963. Smaller than *antalus*, and a darker brown. Woodland from 1400 to 2000m. Larvae feed in the fruits of *Uapaca kirkiana* (Euphorbiaceae).

Virachola montana Kielland, 1985. Similar to *lorisona* but male forewing red patch larger and hindwing marginal band narrower. Female pale areas bluish white. Montane forests and forest margins. Larvae feed in the fruits of *Rutidea*, *Keetia*, etc. (Rubiaceae).

Capys connexivus Butler, 1897. Male above forewing red with black costa, apex and outer margin. Hindwing blackish with a red discal area, reaching outer margin at anal angle. Female grey-blue with very narrow red

marginal markings. Open areas from 1200m upwards. Larvae feed in the flower buds of *Protea* spp (Proteaceae).

Lycaena abbottii Holland, 1892. Above copper with narrow black margins and small black spots. Open situations from 1300m upwards. Larvae feed of Rumex spp (Polygonaceae).

Anthene amarah Guerin, 1847. A small species with a characteristic black patch near the base of the forewing underside. Woodlands at all elevations. Larvae are on Acacia and Dichrostachys (Mimosaceae).

Anthene butleri Oberthur, 1880 ssp livida Trimen, 1881. Male forewing brown, lightly washed with pale blue scales. Hindwing with a yellow lunule in the margin at space 2, and more distinctly washed blue. Female a deeper and more solid blue. Found on *Kalanchoe* above Sanje, in the same places as *Leptomyrina hirundo*.

Anthene definita Butler, 1899. Male upperside uniform pale violet. Female blue at base, fading to white distally. Black markings post medially and a black spot at end of cell. Very common everywhere except undisturbed forest. Larvae on a very wide range of plants.

Anthene hobleyi Neave, 1904. Male upperside darker than definita, underside with dull red markings. Female a brighter blue than definita with wider brown margins and with only the black spot at cell end. Montane forests, males often on mud but females very seldom seen.

Anthene indefinita Bethune-Baker, 1910. Male upperside darker than the previous two species, underside paler. Female brown with a diffuse pale discal area in forewing and white marginal and submarginal hindwing markings. Forests at all altitudes.

Anthene kersteni Gerstaeker, 1871. Male upperside pale blue, underside with many wavy and disjointed lines. Female brown, forewing with pale submarginal marks, hindwing with white submarginal marks. A woodland species, up to 1800m.

Anthene larydas Cramer, 1780. Similar to kersteni but much darker, both male and female, upper and undersides. Forests of low to medium elevations. Larvae on Legumes.

Anthene lasti Grose-Smith & Kirby, 1894. Upperside in both sexes similar to larydas, underside with much reduced markings. Lowland forests up to 800m.

Anthene lemnos Hewitson, 1878 ssp loa Strand, 1911. Male upperside deep violet blue. Underside with distinct markings. Female upperside similar to indefinita, but pale markings usually blue instead of white. Heavy woodland and forest up to 1900m. Larval foodplant Erythrococcus (Euphorbiaceae).

Anthene ligures Hewitson, 1874 ssp amanica Strand, 1909. Male upperside deep violet with a black border, female brown with an indication of paler submarginal markings on the hindwing. Forests from 600 to 1700m.

Anthene liodes Hewitson, 1874. Male upperside pale blue, forewing with a narrow black margin. Underside very pale. Female like that of *hobleyi* but lacking a spot at end of cell. Forests up to 1400m. Larvae on soft extension growth of *Combretum* sp (Combretaceae).

Anthene lunulata Trimen, 1894. Both sexes, both surfaces with red lunules at margin of hindwing space 2. Woodland and savannah at all altitudes. Larvae on Legumes and Combretaceae.

Anthene princeps Butler, 1876. Underside hindwing subbasal spot and rectangular spot in space 7 are very dark. Woodlands up to 2000m. Larvae are on *Entada abyssinica* (Mimosaceae) and *Albizia* (Caesalpiniaceae).

Anthene rubrimaculata Strand, 1909. Underside pale with distinct red spots. Forests up to 2100m. Larvae on *Bridelia* (Euphorbiaceae).

Anthene uzungwae Kielland, 1990. Males very difficult to separate from a number of other species, female upperside forewing blue with a broad black margin, a large black spot at cell end, beyond which a heavy black post discal band. Hindwing brown with blue scaling towards base, and a black line at cell end. Montane forests down to 1750m. Larvae on Choristylis rhamnoides (Grossulariaceae) and Bersama (Melianthaceae).

Cupidopsis cissus Godart, 1824. No tail. Violet blue with orange and black spots at anal angle. Common everywhere except dense forest. Larvae in pods of *Vigna* etc. (Papilionaceae).

Cupidopsis jobates Hopffer, 1855. Smaller than cissus, with more extended orange markings and with a hindwing tail. Same habitats and foodplants as cissus, but less common.

Pseudonacaduba sichela Wallengren, 1857. Upperside blue, underside closely striated with brown and white. Common in all habitats. Larvae on Papilionaceae.

Lampides boeticus Linnaeus, 1767. Upperside blue. Underside brown with whitish bands and lines. A common migrant species at all altitudes. Larvae in pods of Papilionaceae.

Uranothauma antinorii Oberthur, 1883 ssp *felthami* Stevenson, 1934. Upperside forewing blue, paler towards margin. Hindwing brown with a purple wash. Underside white with hollow spots loosely arranged in bands. Forests and woodland.

Uranothauma crawshayi Butler, 1895. A large species. Male upperside brown with a violet wash. Forewing with a wedge-shaped black androconial patch. Female brown with a paler blue wash, black post discal bands on forewing, large black spots on hindwing. Montane forest margins. Larvae on *Choristylis rhamnoides* (Grossulariaceae).

Uranothauma cuneatum Tite, 1958. Much smaller than *crawshayi*, but similarly marked. Montane forest edges and grassland. Larvae on soft extension growth of *Myrica* (Myricaceae).

Uranothauma falkensteini Dewitz, 1879. Upperside brown with a very thin purple wash, forewing with black streaks on the veins. Underside with an irregular dark brown discal band and spots. Forests above 800m. Larvae on *Albizia* (Mimosaceae).

Uranothauma nubifer Trimen, 1895. Similar to *cuneatum*, but underside markings solid. Forests above 1000m. Larvae on *Albizia* and *Acacia* (Mimosaceae).

Uranothauma poggei Dewitz, 1879. Upperside pale blue, forewing with heavy black androconial lines between veins in discal area. Woodland above 800m.

Uranothauma vansomereni Stempffer, 1951. Similar to falkensteini but underside markings paler and smaller. Woodland from 800 to 1300. Uncommon.

Uranothauma williamsi Carcasson, 1961. Upperside dark brown with faint purple wash, forewing with androconial lines less pronounced than in *poggei*. Underside like that of *falkensteini* but much heavier and blacker. Montane forest and grassland.

Phlyaria heritsia Hewitson, 1876 ssp *virgo* Butler, 1896. Male forewing brown with a darker marginal band. In the female the brown area is replaced with white. Hindwing white with a dark marginal band. Forests above 800m. Larvae on soft growth of *Bridelia micrantha* (Euphorbiaceae).

Cacyreus lingeus Stoll, 1782. Upperside coppery blue. Underside brown with white markings. A common woodland species at all altitudes. Larvae on Geraniaceae and Lamiaceae.

Cacyreus palemon Stoll, 1780. Upperside brown with a slight violet sheen. Underside much more boldly marked than *lingeus*. Common in montane grassland, forest edges, etc. Larvae on Geraniaceae.

Cacyreus virilis Aurivillius, 1924. Close to *lingeus*, but according to Kielland the subbasal spot in space 7 is longer, and is placed at a sharper angle to the costa. Woodland, forest margins and open habitats up to 2000m. Larvae are reported from Lamiaceae.

Harpendyreus marungensis Joicey & Talbot, 1924. Upperside blue with brown margins. Underside forewing brown with pale lines, hindwing darker with whitish subbasal and post discal markings, and a prominent blue spot at anal angle. Marshy grassland, riversides, etc. above 1500m.

Leptotes babaulti Stempffer, 1935. Above pale blue with darker margins, underside with fine brown marbling. Common in most habitats up to 2200m.

Leptotes jeanneli Stempffer, 1935. Underside marbling more distinct, and with a paler post discal band on hindwing. Common at all altitudes.

Leptotes marginalis Stempffer, 1944. Upperside with a distinct broad dark margin on both wings. Local in open habitats from 800 to 2000m.

Leptotes pirithous Linnaeus, 1767. Similar to *babaulti* but smaller and a brighter blue. Abundant in all habitats at all altitudes. Larvae feed in pods of Papilionaceae, and also reported from *Plumbago* (Plumbaginaceae).

Leptotes pulchra Murray, 1874. A much brighter shining blue than the other species. Local in wet areas along the Ruaha River.

Tuxentius ertli Aurivillius, 1907. Upperside black with white discal markings, underside white spotted black. Common along streams in forest, males congregating on damp sand. Larval foodplant *Gouania longispicata* (Rhamnaceae).

Tuxentius margaritaceus Sharpe, 1892. Upperside white with black borders, underside white, discal area free from black spots. Forests from 800 to 2000m. Foodplants Gouanea and Ziziphus (Rhamnaceae).

Zizeeria knysna Trimen, 1862. Upperside blue with brown costa and outer margin. Underside pale brown with evenly spaced rows of small black spots. Very common outside of forests at all elevations.

Zizina antanossa Mabille, 1877. Similar to Zizeeria knysna, but underside discal row of black spots interrupted. Grassland and woodland at all altitudes. Foodplants Desmodium and Indigofera (Papilionaceae).

Actizera lucida Trimen, 1883. Upperside blue. Underside brown with white and dark brown spots and a whitish streak in discal area of hindwing. Montane grassland, but descending to near sea level on occasion. Foodplants mainly Papilionaceae.

Actizera stellata Trimen, 1883. Very small. Upperside brown with small white spots, underside similar to *lucida* but darker. Montane grassland. Larvae on *Trifolium* and other Papilionaceae.

Zizula hylax Fabricius, 1775. Upperside blue, underside grey-brown with very small dark spots. Common outside forests at all elevations. Larvae on seed heads of *Oxalis* (Oxalidaceae).

Azanus jesous Guerin-Meneville, 1849. The various species of Azanus are blue above, and with a similar pattern of lines and spots on the undersides. All feed on Acacia (Mimosaceae). The underside of A.. jesous has a dark bar

across the forewing apex and a short dark bar in the hindwing discal area. Common outside forests at all elevations.

Azanus mirza Plotz, 1880. Has a spot instead of a bar in the hindwing discal area. Larvae on Allophylus (Sapindaceae) in addition to Mimosaceae.

Azanus moriqua Wallengren, 1857. Smaller than the previous species. Underside markings more sharply contrasting. Dry woodland and savannah. Larvae eat the flower buds of *Acacia* spp.

Azanus natalensis Trimen, 1887. Large. Underside with a heavy brown bar along costa joining a heavy bar across apex. Woodland and savannah up to 2000m.

Azanus ubaldus Stoll, 1782. Small. Underside markings indistinct. Arid areas up to 2400m.

Eicochrysops hippocrates Fabricius, 1793. Upperside brown with a characteristic white tip to forewing. In swamps and along rivers. Foodplants flower heads of *Polygonum* and *Rumex* (Polygonaceae).

Eicochrysops messapus Godart, 1824 ssp mahallakoena Wallengren, 1857. Upperside varies from blue to golden, with a marginal red and blue spot in space 2 of hindwing. Underside pale brown with rows of submarginal paler and darker spots, and a marginal red and blue spot as upperside. Montane grassland.

Euchrysops crawshayi Butler, 1899 ssp fontainei Stempffer, 1967. Upperside brown with blue scaling towards base. Underside forewing with rows of paler spots, hindwing with a pale splash in discal area. Cilia chequered brown and grey. Montane grassland. Larvae feed on the roots of Myosotis and Anchusa (Boraginaceae).

Euchrysops malathana Boisduval, 1833. Upperside mid brown with the usual spot in hindwing space 2. Underside Distal half of both wings with rows of paler and darker spots, basal half of hindwing with four white-ringed black spots. Open habitats and woodland up to 2200m. Foodplants mainly Papilionaceae.

Euchrysops nandensis Neave, 1904. Smaller and darker than *malathana*, and with a whitish post discal band on hindwing underside.

Montane grassland and woodland above 1500m.

Euchrysops subpallida Bethune-Baker, 1922. Upperside blue, underside varies from grey to brownish grey. Montane grasslands, particularly following the burning of the grass early in the dry season.

Lepidochrysops cupreus Neave, 1910. Short tails. Upperside coppery with dark margins and a black spot at end of forewing cell. Underside very distinctive, warm brown with black spots and lacking a submarginal band. Usually in woodland at about 1100m. Eggs of this group are usually laid on Becium (Lamiaceae) or Lantana (Verbenaceae), and the larvae are subsequently taken down into ants' nests where they feed on the ant brood.

Lepidochrysops desmondi Stempffer, 1921. Male upperside greyish brown. Underside forewing post discal band almost straight. Common in *Brachystegia* woodland up to 1800m.

Lepidochrysops glauca Trimen, 1887. A short hindwing tail. Underside greyish brown with the paler and darker markings, and black spots in basal half of hindwing, usual for the genus. Upperside with a strong pastel blue iridescence. Woodland up to about 1200m in the Ruaha valley.

Thermoniphas micyclus Cramer, 1780 ssp colorata Ungemach, 1932. A small species with a short hindwing tail. Above blue with darker margins. Below pale silvery grey with a marginal row of black spots and a post discal row of brown ones. Fluttering rather weakly in open patches in forest up to about 1500m. Larvae on Dissotis rotundifolia and Calvoa orientalis (Melastomataceae).

Oboronia bueronica Karsch, 1895. A short tail. Upperside white, forewing with a broad black apex and outer margin, hindwing with a marginal row of black spots. Underside white with a reduced row of hindwing marginal black spots, and upperside black markings showing through. In forests, usually along rivers, up to 1800m. Larvae feed in the inflorescence of *Costus* spp (Zingiberaceae).

Freyeria trochylus Freyer, 1843. Very small. Hindwing on both surfaces with three black spots bordered on the inside with orange. Upperside dark brown. Underside forewing with a discal row of black spots. Woodland and savannah up to 2000m.

RIODINIDAE

(The Judys)

Abisara delicata Lathy, 1901 ssp tanzania Kielland, 1986. Hindwing anal angle produced into a broad tail. Upperside white, apical half of forewing dark brown containing a narrow white subapical band. Hindwing on both

surfaces with two prominent black eye-spots. Medium altitude forests from 800 to 1400m. Larval foodplant *Maesa lanceolata* (Myrsinaceae).

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<u>Udzungwa National Park</u> <u>Checklist</u>

Additions 2001

Note: These have been added to the checklist above

During a visit to the higher levels of the Park, accessible from Udekwa Village, we became aware of a large area of *Brachystegia* woodland, beyond Luhomero Mountain, descending to about 600m. This constitutes a fifth major vegetation type within the Park, with a rich and characteristic butterfly fauna of its own. We are therefore now able to add to the checklist many species characteristic of this habitat type. These are listed below, together with high altitude species we were able to confirm.

Coeliades libeon Druce, 1875. Smaller than the other species. Upperside and underside uniformly dull brown. Woodland and forests up to 1900m. Foodplants *Drypetes* (Euphorbiaceae) and *Millettia* (Papilionaceae).

Coeliades sejuncta Mabille & Vuillot, 1891. Underside hindwing discal band rather narrow, yellowish, lower half orange containing two rows of black spots. Forests up to 2100m. Larval foodplant Acridocarpus zanzibaricum (Malpigiaceae).

Celaenorrhinus bettoni Butler, 1902. A small species. Forewing orange band broken into spots, and upperside generally with orange hairs on a brown background.

Eagris nottoana Wallengren, 1857. Male brown on both surfaces, forewing with two or three clear forewing spots. Female paler, forewing with a row of squareish clear spots, and with a whitish hindwing underside. Forests at all elevations. Local. Foodplants Scutia (Rhamnaceae), Dombeya (Sterculiaceae) and Grewia (Tiliaceae).

Eagris sabadius Gray, 1832 ssp *astoria* Holland, 1896. Warm brown with irregular hyaline forewing spots. Forests above 800m. Larvae on *Grewia* (Tiliaceae) and *Rhus* (Anacardiaceae).

Sarangesa seineri Strand, 1909 ssp tanga Evans, 1937. Dark brown with blackish marbling, forewing with a few clear spots, hindwing with an irregular edge. Woodland and rocky hills.

Caprona pilaana Wallengren 1857. Forewing apex sharply angled, hindwing margin irregular

and angled. Upperside brown, boldly marked with blackish and whitish. Woodland.

Foodplants *Dombeya* (Sterculiaceae) and *Grewia* (Tiliaceae).

Abantis venosa Trimen 1889. Upperside brown with blackish veins, forewing with hyaline spots. Underside hindwing whitish with a brown border. Woodland. Foodplant Pterocarpus tinctorius and probably Pterocarpus angolensis (Papilionaceae) (Mninga).

Metisella sp n. (Kielland p. 237). Similar to *medea* but smaller, forewing less boldly spotted with yellow, hindwing more boldly. Forest margins, etc. at high altitudes.

Metisella medea Evans, 1937. Brown with round orange spots on both wings. Open habitats at high altitudes.

Metisella willemi Wallengren, 1857. Above dark brown, forewing with pale markings, underside hindwing with pale yellow streaks and brown lines. Woodland up to 2000m. Larvae feed on grasses.

Kedestes wallengreni Trimen, 1883 ssp fenestratus Butler, 1893. Above dull brown, forewing sharply angled, and with discal hyaline spots. Underside paler, hindwing with thin whitish streaks along the veins. Woodlands and highland grasslands.

Gorgyra diva Evans, 1937. A very small dull brown skipper, with a white tip to the abdomen. Forests and heavy woodland up to 1500m.

Paracleros biguttulus Mabille, 1889. Another very small skipper. Upperside blackish with a white hindwing margin, underside dark brown finely speckled with white scales. Forests up to 1300m.

Chondrolepis similis De Jong, 1986. White antennae. Above dark brown, forewing with hyaline spots. Underside paler, a wedge-shaped median band on hindwing, and forewing costa rusty red-brown. This species was believed to be confined to forests in Mufindi, but has now been found along ridge-tops at high altitudes near Luhomero Mountain.

Fresna nyassae Hewitson, 1878. Underside pale purple or yellowish, with black spots. Woodland. Foodplant Albizia sp. (Caesalpiniaceae).

Platylesches panga Evans, 1937. Palpi white below. Forests at intermediate elevations.

Eronia cleodora Hubner, 1823 ssp *dilatata* Butler, 1888. Wing margins with black borders of varying width. Heavy woodland up to 1200m. Foodplants Capparidaceae.

Appias lasti Grose-Smith 1889. Both sexes with an orange hindwing. Lowland forest to 800m. Foodplants *Drypetes* and *Phyllanthus* (Euphorbiaceae) and *Maerua* and *Capparis* (Capparidaceae).

Mylothris ruppellii Koch, 1865 ssp rhodesiana Riley, 1921. A large species with reddish basal areas on both wings. Heavy woodland and forest margins to 2000m. Foodplants Loranthaceae.

Acraea acara Hewitson, 1865. A large species. Deep red with black markings. Woodland and forests to 1800m. Foodplants Passifloraceae, but the closely related A. zetes Linnaeus 1758, is also reported from Hydnocarpus (Flacourtiaceae) and Barleria (Acanthaceae). Acraea anemosa Hewitson, 1865. Ground colour red, hindwing with a broad black marginal border, forewing with heavy black marking at cell end. Woodland. Larvae are reported on Passifloraceae, and on Vitis (Vitaceae) and less probably on grasses.

Acraea caecilia Fabricius, 1781 ssp pudora Aurivillius, 1910. Ground colour brownish red, hindwing margin and forewing apex blackish, both wings with small black spots. Dry thorn country in the Ruaha valley. Larvae on Adenia (Passifloraceae).

Acraea pseudolycia Butler, 1874 ssp astrigera Butler, 1899. Similar to anemosa, but with white spots in the black hindwing border. Woodland and open habitats up to 2000m.

Acraea utengulensis Thurau, 1903. Clear bright red, with a black forewing apex. Hindwing with a narrow black border containing red spots, and both wings with round black spots. Brachystegia woodland up to 2000m.

Danaus petiverana Doubleday & Hewitson, 1847. Black with many pale blue spots and dashes. Woodland and forest up to 1600m. Foodplants Asclepiadaceae. This species is probably the model for *Graphium leonidas*.

Henotesia perspicua Trimen, 1873. Similar to *H. simonsii*, but underside discal line more heavily developed. Woodland to 2150m.

Ypthima impura Elwes & Edwards, 1893 ssp **paupera** Ungemach, 1932. Larger than related species, and ground colour a richer brown. Woodland.

Ypthima rhodesiana Carcasson, 1961. Has an evenly curved median brown line on hindwing underside. Brachystegia woodland up to 1500m.

Lachnoptera ayersi Trimen, 1879. Previously treated as a subspecies of *iole* Fabricius, 1871. A large reddish-brown butterfly with a prominent blue patch on the hindwing. Forests up to 2000m. Foodplant Rawsonia (Flacourtiaceae).

Junonia actia Distant, 1880. One of a number of highly variable and seasonally dimorphic species inhabiting *Brachystegia* woodland. These can usually be separated by reference to illustrations in the literature. Larvae of *Junonia* are on Lamiaceae and Acanthaceae.

Junonia cuama Hewitson, 1864. Similar to *antilope*, but with two white subapical dots on the forewing. Woodland up to 2000m.

Junonia pelarga Fabricius, 1775. Similar to *actia*, but the black dot in the patch in forewing space 3 is placed distally, whereas in *actia* it is in the middle of the patch. Woodland up to 2000m, often flying with *actia*.

Neptis alta Overlaet, 1955. Underside with more strongly developed white markings than

in related species. *Brachystegia* woodland to 2000m.

Neptis kiriakofi Overlaet, 1955. Like laeta, but white dots in forewing cell are larger. Brachystegia woodland to 2000m. Foodplants are given as Paullinia (Sapindaceae), Pilea (Urticaceae) and Acalypha (Euphorbiaceae), however Neptis species are difficult to determine, and it is possible that these records refer to related species.

Neptis trigonophora Butler, 1878. White streak in forewing cell obsolete or nearly so. Low altitude forests.

Catuna sikorana Rogenhofer, 1889. Forewing black with a white subapical bar and fine pale lines. Hindwing deep orange with brown markings. Common in forests up to 1200m. Foodplants Mimusops and Englerophytum (Sapotaceae). (Englerophytum was formerly known as Bequaertiodendron.)

Mimacraea marshalli Trimen, 1898. Looks like a miniature *Danaus chrysippus*, with which it possibly has a mimetic association. Woodland up to about 1500m. Larvae of other species have been raised on algae on tree trunks (not lichens as usually stated).

Baliochila hildegarda Kirby, 1887. Orange areas much extended compared with other species present in the Park. A *Brachystegia* woodland species. Larvae on algae on trees.

Aphnaeus erikssoni Trimen, 1891 ssp rex Aurivillius, 1909. Brachystegia woodland up to 1800m. Larvae live with ants on *Brachystegia*, Julbernardia and Burkea (Caesalpiniaceae).

Lipaphnaeus aderna Plotz, 1880 ssp *spindasoides* Aurivillius, 1916. Male blue with orange at the hindwing anal angle. Female ochreous with brown borders on the forewing. Forests to 1200m. Foodplant not known, but the related *L. loxura* Rebel, 1914 lives with ants on *Maesa* spp (Myrsinaceae).

Axiocerses amanga Westwood, 1881. Hindwing red. Forewing black with lower median area red. Underside duller brownish red. Woodland up to 2000m. Larvae are on Ximenia (Olacaceae).

Epamera bakeri Riley, 1928. Upperside bright blue with a black forewing apex. Underside white with a faint dark submarginal line and a

red tornal spot. Uncommon in *Brachystegia* woodland. Larvae feed on *Tapinanthus dependens* (Loranthaceae).

Epamera violacea Riley, 1928. Underside with two dark lines and a dark streak in the forewing cell. Woodland up to 2000m. Larvae on *Globimetula*, *Tapinanthus*, *Phragmanthera* and *Helixanthera* (Loranthaceae), usually on the flowers.

Aphniolaus pallene Wallengren, 1857. Quite unmistakable, rich yellow with a dark forewing apex, underside with dark transverse lines. Woodland up to about 1500m. Larvae are on *Ximenia* (Olacaceae).

Argiolaus ndolae Stempffer & Bennett, 1958. Very similar to A. silarus, but may be distinguished in the hand by the dull brown underside of the antennae. Larvae are on the same foodplants and the two species fly together. The egg has much smaller indentations, the young larvae are brown not green, and the genitalia of the adults are completely different.

Anthene amarah Guerin, 1847. A small species with a characteristic black patch near the base of the forewing underside. Woodlands at all elevations. Larvae are on Acacia and Dichrostachys (Mimosaceae).

Anthene princeps Butler, 1876. Underside hindwing subbasal spot and rectangular spot in space 7 are very dark. Woodlands up to 2000m. Larvae are on *Entada abyssinica* (Mimosaceae) and *Albizia* (Caesalpiniaceae).

Cacyreus virilis Aurivillius, 1924. Close to *lingeus*, but according to Kielland the subbasal spot in space 7 is longer, and is placed at a sharper angle to the costa. Woodland, forest margins and open habitats up to 2000m. Larvae are reported from Lamiaceae.

Euchrysops subpallida Bethune-Baker, 1922. Upperside blue, underside varies from grey to brownish grey. Montane grasslands, particularly following the burning of the grass early in the dry season.

Lepidochrysops desmondi Stempffer, 1921. Male upperside greyish brown. Underside forewing post discal band almost straight. Common in Brachystegia woodland up to 1800m. Eggs of this group are usually laid on Becium (Lamiaceae) or Lantana (Verbenaceae), and the larvae are subsequently

taken down into ants' nests where they feed on the ant brood.