

Genus *Melanitis* Fabricius, 1807 Evening Browns

In: Illiger, K., *Magazin für Insektenkunde* 6: 282 (277-289).

Type-species: *Papilio leda* Linnaeus, by subsequent designation (Butler, 1868. *Entomologist's Monthly Magazine* 4: 194 (193-197).).

= *Cyllo* Boisduval, 1832. *Voyage de Découvertes de L'Astrolabe sous le commandement de M. J. dumont D'Urville. Faune entomologique de l'Océan Pacifique. Lépidopteres* (1): 140 (267 pp.). Paris.
Type-species: *Papilio leda* Linnaeus, by subsequent designation (Scudder, 1875. *Proceedings of the American Academy of Arts and Sciences* 10: 151 (91-293).).

Synonym based on extralimital type species: *Hipio* Hübner.

The genus *Melanitis* belongs to the Family Nymphalidae Rafinesque, 1815; Subfamily Satyrinae Boisduval, 1833; Tribe Melanitini Reuter, 1896. The other genera in the Tribe Melanitini in the Afrotropical Region are *Gnophodes*, *Ducarmeia* and *Haydonia*.

Melanitis (**Evening Browns**) is an Old World genus of 11 species, two of which are Afrotropical. One of the Afrotropical species extends extraliminally (to the Oriental Region).

**Melanitis leda* (Linnaeus, 1758)# Common Evening Brown



Common Evening Brown (*Melanitis leda*). Left – Wet season form. Centre and right – Dry season forms.
Images courtesy Steve Woodhall (left and centre) and Jeremy Dobson (right).

Papilio leda Linnaeus, 1758. *Systema Naturae* 1, Regnum Animale, 10th edition: 474 (824 pp.). Holmiae.

Cyllo leda Linnaeus. Trimen, 1866a.

Melanitis leda (Linnaeus, 1767). Trimen & Bowker, 1887a.

Melanitis leda Linnaeus. Swanepoel, 1953a.

Melanitis leda africana Fruhstorfer, 1908. Dickson & Kroon, 1978.

Melanitis leda (Linnaeus, 1758). Larsen, 1991c.

Melanitis leda helena (Westwood, 1851). Pringle *et al.*, 1994: 50.

Melanitis leda (Linnaeus, 1758). Larsen, 2005a.

Melanitis leda helena (Westwood, 1851). Lawrence, 2014 [not formally downgraded to subspecies status].



Melanitis leda. Male, wet season form (Wingspan 59 mm). Left – upperside; right – underside.
Manguzi Forest, KwaZulu-Natal, South Africa. 26 March 2005. J. Dobson.
Images M.C. Williams ex Dobson Collection.



Melanitis leda. Male, dry season form (Wingspan 61 mm). Left – upperside; right – underside.
Lekgalameetse N.R., Limpopo, South Africa. April 2006. M. Williams.
Images M.C. Williams ex Williams Collection.



Melanitis leda. Male, dry season form (Wingspan 64 mm). Left – upperside; right – underside.
Lekgalameetse N.R., Limpopo, South Africa. April 2006. M. Williams.
Images M.C. Williams ex Williams Collection.



Melanitis leda. Male, dry season form (Wingspan 64 mm). Left – upperside; right – underside.
Politsi, Limpopo, South Africa. May 2011. M. Williams.
Images M.C. Williams ex Williams Collection.



Melanitis leda. Female, wet season form (Wingspan 65 mm). Left – upperside; right – underside.
Thabazimbi, Limpopo Province, South Africa. 1 March 2008. M. Williams.
Images M.C. Williams ex Williams Collection.



Melanitis leda. Female, dry season form (Wingspan 70 mm). Left – upperside; right – underside.
Blyde Canyon N.R., Mpumalanga, South Africa. 24 April 1999. M. Williams.
Images M.C. Williams ex Williams Collection.



Melanitis leda. Female, dry season form (Wingspan 69 mm). Left – upperside; right – underside. Bergpan, Limpopo Province, South Africa. December 1981. P. Stobbia. Images M.C. Williams ex Dobson Collection.

Alternative common name: Common Evening Brown.

Type locality: China: “Canton”. [Lectotype designated by Honey & Scoble, 2001: 341.]

Distribution: Sub-Saharan Africa, including Senegal, Gambia, Guinea-Bissau (Aurivillius, 1910), Guinea, Mali, Burkina Faso, Sierra Leone, Liberia, Ivory Coast, Ghana, Togo, Benin (throughout), Nigeria, Cameroon, Equatorial Guinea (Bioko), Gabon, Central African Republic, Democratic Republic of Congo, Uganda, Kenya, Tanzania, Malawi, Zambia, Angola, Mozambique, Zimbabwe, Botswana (north and east), Namibia (north), South Africa (Limpopo Province, Mpumalanga, North West Province, Gauteng, KwaZulu-Natal, Eastern Cape Province, Western Cape Province), Swaziland (Duke *et al.*, 1999). Also in Saudi Arabia (south-west), Yemen, Oman, Cape Verde Islands, Sao Tome & Principe (islands of Sao Tome and Principe), Equatorial Guinea (Annobon), Mauritius, Rodrigues, Reunion, Seychelles, Mafia Island, Comoro Islands, Madagascar.

Extralimitally in the Oriental Region, Australian Region, and several of the Pacific Island groups.

Specific localities:

Cape Verde Islands – Brava Island (Tennent & Russell, 2019); Santiago Island (Tennent & Russell, 2019);

Sao Nicolau Island (Tennent & Russell, 2019); Santo Antao Island (Tennent & Russell, 2019).

Gambia – Fajara, Brufut, Tintinto, Abuko, Pirang, Walikunda Basse (Jon Baker, pers. comm, May 2020).

Guinea – Zياما (Safian *et al.*, 2020).

Liberia – Wologizi (Safian *et al.*, 2020); Wonegizi (Safian *et al.*, 2020).

Ivory Coast – Lamto (Vuattoux, 1994).

Ghana – Bobiri Butterfly Sanctuary (Larsen *et al.*, 2007); Boabeng-Fiema Monkey Sanctuary (Larsen *et al.*, 2009).

Benin – Noyau Central, Lama Forest (Fermon, *et al.*, 2001); Lokoli (Tchibozo *et al.*, 2008); Houeyogbe Forest (Coache & Rainon, 2016).

Cameroon – Korup (Larsen, 2005a).

Gabon – Probably throughout (Vande weghe, 2010); Iguela (Vande weghe, 2010); Akaka (Vande weghe, 2010); Kinguele (Vande weghe, 2010); Tchimbele (Vande weghe, 2010); Waka (Vande weghe, 2010); Ipassa (Vande weghe, 2010); Franceville (Vande weghe, 2010); Ekouyi (Vande weghe, 2010); Camp PPG, Bateke Plateau (Vande weghe, 2010).

Central African Republic – Dzanga (Noss, 1998).

Democratic Republic of Congo – Ituri Forest (Ducarme, 2018); Semuliki Valley (Ducarme, 2018); Central Forest Block (Ducarme, 2018); Mt Mitumba (Ducarme, 2018); Mt Blue (Ducarme, 2018).

Uganda – Semuliki N.P. (Davenport & Howard, 1996).

Kenya – Widespread (Larsen, 1991c).

Tanzania – Throughout (Kielland, 1990d); Semdoe Forest Reserve (Doggart *et al.*, 2001); Katavi National Park (Fitzherbert, *et al.*, 2006); Moshi (Liseki & Vane-Wright, 2015); Taveta (Liseki & Vane-Wright, 2015).

Malawi – Mt Mulanje (Congdon *et al.*, 2010); Zomba Mountain (Congdon *et al.*, 2010); Nyika N.P.

Zambia – Ikelenge (Heath *et al.*, 2002); Mwinilunga (Heath *et al.*, 2002); Kabompo Gorge (Heath *et al.*, 2002); Mufulira (Heath *et al.*, 2002); Kitwe (Heath *et al.*, 2002); Lusaka (Heath *et al.*, 2002); Victoria Falls (Heath *et al.*, 2002); Kasama (Heath *et al.*, 2002); Nkamba Bay (Lake Tanganyika) (Heath *et al.*, 2002); Nyika (Heath *et al.*, 2002).

Mozambique – Mount Chipirone (Timberlake *et al.*, 2007); Mt Inago (Congdon *et al.*, 2010); Mt Namuli (Congdon *et al.*, 2010); Mt Mabu (Congdon *et al.*, 2010); Mt Yao [-12.4432 36.5114] (Congdon & Bayliss, 2013).

Botswana – Gaborone (Larsen, 1991); Tlokweng (Larsen, 1991); Serowe (Larsen, 1991); Tswapong Hills (Larsen, 1991); Selibe-Phikwe (Larsen, 1991); Shashe (Larsen, 1991); Francistown (Larsen, 1991); Nata (Larsen, 1991); Chobe (Larsen, 1991); Moremi (Larsen, 1991); Maun (Larsen, 1991); Lake Ngami (Larsen, 1991); Shakawe (Larsen, 1991); Tsodilo Hills (Larsen, 1991); Makgadikgadi (R. Vane-Wright; single record *vide* Larsen, 1991); near Motokwe (Larsen, 1991).

Limpopo Province – Warmbaths (Swanepoel, 1953); Potgietersrus (Swanepoel, 1953); Chuniespoort (Swanepoel, 1953); Tubex (Swanepoel, 1953); Woodbush (Swanepoel, 1953); Lekgalameetse Nature Reserve (“Malta Forest”) (Swanepoel, 1953); Munnik (Swanepoel, 1953); Mokeetsi (Swanepoel, 1953); Ramatoelaskloof (Swanepoel, 1953); Saltpan (Swanepoel, 1953); Wyliespoort (Swanepoel, 1953; male illustrated above); Louis Trichardt (Swanepoel, 1953); Sibasa (Swanepoel, 1953); Soetdoring Farm [-24.561 28.233] (A. Mayer, pers comm. 2015).

Mpumalanga – Mariepskop area (Henning, 1994c); Buffelskloof Nature Reserve (Williams).

North West Province – Zeerust (Swanepoel, 1953); Rustenburg (Swanepoel, 1953); Kgaswane Mountain Reserve (Williams); Utopia Resort (C. Dobson, 2006); Borakalalo Nature Reserve (J. Dobson, unpublished, 2009).

Gauteng – Pretoria (Swanepoel, 1953).

KwaZulu-Natal – Margate (Swanepoel, 1953); Scottburgh (Swanepoel, 1953); Umkomaas (Swanepoel, 1953); Durban (Swanepoel, 1953); Pietermaritzburg (Swanepoel, 1953); Estcourt (Swanepoel, 1953); Eshowe (Swanepoel, 1953); St Lucia Bay (Swanepoel, 1953); Kosi Bay Nature Reserve (Pringle & Kyle, 2002); Tembe Nature Reserve (Pringle & Kyle, 2002); Ndumo Nature Reserve (Pringle & Kyle, 2002).

Eastern Cape Province – Bashee River (Swanepoel, 1953); Port St Johns (Swanepoel, 1953).

Western Cape Province – Single specimens from Wilderness (Dickson); Bedford district (Pringles); Beaufort West (Pringle *et al.*, 1994); Cape Town (Brinkman); Tokai Forest (Woodhall).

Mauritius – Widespread and common (Davis & Barnes, 1991). Grand Gaube (Lawrence, 2016).

Seychelles – Mahe (Lawrence, 2014); St. Anne (Lawrence, 2014); Praslin (Lawrence, 2014); Silhouette (Lawrence, 2014); North Island (Lawrence, 2014); La Digue (Lawrence, 2014); Aride (Lawrence, 2014); Cousin (Lawrence, 2014); Cousine (Lawrence, 2014); Curieuse (Lawrence, 2014); Desroches (Lawrence, 2014); Aldabra (Lawrence, 2014); Cosmoledo (Lawrence, 2014).

Habitat: Forest and savanna, including arid savanna. In Tanzania it occurs at altitudes from sea-level to 2 000 m (Kielland, 1990d).

Habits: A very common, widespread, crepuscular butterfly that spends the day roosting among dead leaves and leaf litter in the shade of trees. Specimens are wonderfully camouflaged, and if disturbed will flap ponderously for a short while before alighting again among dead leaves, almost miraculously disappearing when they do so. Brakefield & Larsen (1984) hypothesized that large eye-spots were the best defence for the active wet-season form, while camouflage was a more effective defence in the more sedentary dry-season form. Apparently, subsequent research has supported this hypothesis (Larsen, 2005a). Specimens may be attracted to light since they remain active till after midnight (Larsen, 2005a). They are strongly attracted to fermenting fruit (Pringle *et al.*, 1994). Normally they do not feed from flowers but Larsen (1991) found numbers of freshly-hatched dry-season specimens feeding from the blossoms of *Lantana* (Verbenaceae), early one morning, in Delhi, India. This may have been due to fermentation of the nectar in the lantana flowers (Larsen, 2005a). On the granitic islands of Seychelles it is often attracted to the fallen fruit of *Artocarpus heterophyllus* (Lawrence, 2014).

Flight period: All year, with well-defined wet- (September to March) and dry-season (March to August) broods (Woodhall, 2005). The dry-season form is more abundant than the wet-season form (Pringle *et al.*, 1994).

Early stages:

Horsfield & Moore, 1857. (*Cat. Lep. H.E.I.C. Mus.*, pl. vi. Ff. 8, 8a; Java).

Moore, 1880. (*Lep. Ceyl.*, i. pl. 10, ff. 2a, 2b; as *M. Ismene*; Ceylon).

Trimen & Bowker, 1887, Vol. 1: 114 [as *Melanitis Leda* (L.); KwaZulu-Natal coast].

“**Larva.** Bright yellow, shaded with greenish; nine longitudinal green streaks, viz., one central, dorsal; and on each side two thin ones (subdorsal and lateral), one wider lateral, and one thin just above legs. Cephalic horns divergent, projecting almost directly forward, only slightly ascendant at extremity. Caudal processes about as long as cephalic horns, but stouter at base, acuminate, and less divergent. The surface generally is transversely ribbed, and very slightly pubescent. Feeds on the “Bush Guinea Grass”. “Mr. W.D. Gooch sent me the notes and rough drawing from which the above description is made. He observes that the Larva was not uncommon on the Natal Coast, and was invariably found on the under side of the leaves of its food-plant, generally at the base with its head downward. Many of the specimens observed were ichneumonid. It should be observed that the larva of the Oriental *Leda* is represented as greener than Mr. Gooch describes that of the Natal *Leda* to be; and also that in the figure in the *Lepidoptera of Ceylon*... the larva is depicted as having the cephalic horns rusty-red and perpendicular instead of greenish-yellow and porrect, and as possessing on each side of the face a vertical, black, outwardly white-edged stripe running from the base of the horn. **Pupa.** Mr. Gooch has given me no record of this stage. The figures of the Indian and Cingalese [Sri Lankan] specimens give the pupa as green, rather paler on the wing-covers, which bear two or three blackish lines, probably indicating some of the nervures. The Indian pupa is represented as attached to a thin stalk, the Cingalese to the edge of a broad leaf of a grass.”

Clark, in Van Son, 1955: 23.

Egg – Diameter 1.0-1.2 mm; height 0.85-0.9 mm. Watery white, gradually changing to pale yellow. Surface with a faint irregular tracing. Incubation 4-5 days. 1st instar larva – White with black setae; head black with brown moles and sides; tail forked and turns brown; larva turns green; dorsal rows of setae lean in opposite directions except for the first two and last three segments. Discarded shell not invariably eaten. Duration four days and growing from 2,25 to 6,25 mm. 2nd instar larva – Pale green with double white subdorsal line on each side; cephalic processes appear. Growing to 10-11 mm in three days. 3rd instar larva – Darker green; cephalic processes longer than head. Growing to 17-19 mm in four days. 4th instar larva – Light green with narrow darker green dorsal line. Grows to 27-31 mm in five days. 5th instar: larva – Paler than 4th instar but head darker. Growing to 44-49 mm in eight days. From the 3rd instar the shade of green of the body varies slightly. The green patch in front of the head varies in size in the 3rd instar and is larger in the 4th. In the 5th instar larva the head may be black or it may be green with black horns, the black extending down to the ocelli in a thin stripe. There are numerous intermediate colour forms. Another form is black in front with the diamond-shaped spot yellow-green, and brick-red behind; the ocelli are on a white patch. Pupa – 20 mm long; pale green; a slight dorso-thoracic hump; suspended by cremasral hooks. Pupal period 10 days. Whole cycle 38 days but cycles may be 46 days or longer.

Dickson, 1972.

Carcasson, 1981 [larva and pupa].

Nakasuji, 1987

Hawkeswood, 1990 [parasitoids; Australia].



Eggs, final instar larva and pupa of *Melanitis leda*. Images courtesy Allison Sharp.

Larval food:

- Andropogon macrophyllus* Stapf (Poaceae) [Vuattoux, 1994; Lamto, Ivory Coast].
Bambusa vulgaris Schrad. ex J.C. Wendl. (Poaceae) (exotic) [Vuattoux, 1994; Lamto, Ivory Coast].
 Bush Guinea Grass (Poaceae) [Gooch, *in* Trimen & Bowker, 1887, Vol. 1: 114; KwaZulu-Natal coast].
Cynodon species (Poaceae) [Pringle *et al.*, 1994: 50].
 Cyperaceae? [Larsen, 1991c: 264].
Cyperus cyperoides (L.) Kuntze subsp. *flavus* Lye (Cyperaceae) [Vuattoux, 1994; Lamto, Ivory Coast; as *Mariscus umbellatus*].
Digitaria atrofusca (Hack.) A. Camus (Poaceae) [Vuattoux, 1994; Lamto, Ivory Coast; as *Digitaria seminuda*].
Digitaria diversinervis (Nees) Stapf (Poaceae) [Nichols, *vide* Botha & Botha, 2006].
Ehrharta erecta Lam. (Poaceae) [Nichols, *vide* Botha & Botha, 2006].
Ehrharta species (Poaceae) [Heath *et al.*, 2002: 49].
Imperata cylindrica (L.) Raeusch. (Poaceae) [Vuattoux, 1994; Lamto, Ivory Coast].
Oplismenus hirtellus (L.) P. Beauv. (Poaceae) [Nichols, *vide* Botha & Botha, 2006].
Oryza sativa L. (Poaceae) (“rice”) (cultivated exotic) [Van Son, 1955: 23; for the Indo-Australian region].
 Palmae [Lawrence, 2014: 60; Seychelles].
Panicum laticomum Nees (Poaceae) [Nichols, *vide* Botha & Botha, 2006].
Panicum maximum Jacq. (Poaceae) [Vuattoux, 1994; Lamto, Ivory Coast].
Paspalum conjugatum P.J. Bergius (Poaceae) [Vuattoux, 1994; Lamto, Ivory Coast].
Pennisetum clandestinum Hochst. ex Chiov. (Poaceae) [Pringle *et al.*, 1994: 50].
Pennisetum polystachion (L.) Schult. (Poaceae) [Vuattoux, 1994; Lamto, Ivory Coast; as *Pennisetum subangustatum*].
Pennisetum scrobiculatum L. var. *scrobiculatum* R. Br. (Poaceae) [Vuattoux, 1994; Lamto, Ivory Coast; as *Pennisetum polystachum*].
Prosphytochloa prehensilis (Nees) Schweik (Poaceae) [Nichols, *vide* Botha & Botha, 2006].
Pseudechinolaena polystachya (Kunth) Stapf (Poaceae) [Nichols, *vide* Botha & Botha, 2006].
Rottboellia cochinchinensis (Lour.) Clayton (Poaceae) [Vuattoux, 1994; Lamto, Ivory Coast; as *Rottboellia exaltata*].
Saccharum officinarum L. (Poaceae) (cultivated “sugar cane”) [Vinson, 1938 (Mauritius); Van Son, 1955: 23 (South Africa)].
Setaria culeata (Poaceae) [Van Someren, 1974: 324; no such name. Probably a misspelling of *Setaria ciliolata* Stapf & C.E. Hubb., itself a synonym of *Setaria incrassata* (Hochst.) Hack.].
Setaria lindenbergiana (Nees) Stapf (Poaceae) [Nichols, *vide* Botha & Botha, 2006].
Setaria megaphylla (Steud.) T. Durand & Schinz (Poaceae) [Green, *vide* Platt, 1921; Vuattoux, 1994 (Lamto, Ivory Coast)].
Setaria sulcata Raddi (Poaceae) [Dickson & Kroon, 1978: 35].
Setaria verticillata (L.) P. Beauv. (Poaceae) [Joannou, *in* Pringle *et al.*, 1994: 50].

Sorghum arundinaceum (Dosv.) Stapf (Poaceae) [Vuattoux, 1994; Lamto, Ivory Coast].
Sporobolus pyramidalis P. Beauv. (Poaceae) [Vuattoux, 1994; Lamto, Ivory Coast].
Thysanolaena latifolia (Roxb. ex. Hornem.) Honda (Poaceae) [Vinson, 1938; Mauritius; as *Thysanolaena maxima* Kuntze. This is an ornamental exotic grass, known as ‘Tiger grass’].
Zea mays L. (Poaceae) (cultivated exotic) [Vuattoux, 1994; Lamto, Ivory Coast].

Relevant literature:

Shi *et al.*, 2013 [Complete mitochondrial genome].
 Girish *et al.*, 2012 [Population dynamics in rice ecosystems].
 Tumang *et al.*, 2012 [Wing pattern development]
 Islam *et al.*, 2010 (2011) [Observations on seasonal forms in Bangladesh]
 Tomer & Malik, 2008 [Development, fecundity and morphometrics on sugar cane].
 Kemp, 2005 [Comparison of territorial success with *Hypolimnas bolina*].
 Kemp, 2003 [Male territoriality].
 Kemp, 2002 [Mate-searching behaviour].
 Larsen, 2002c [Seasonal variation in Bangladesh].

helenae Westwood, 1851 (as sp. of *Cyllo*). *In* Doubleday & Westwood, [1846-52]. *The genera of diurnal Lepidoptera*, London: 361 (1: 1-250 pp.; 2: 251-534 pp.). London. “Western tropical Africa”. Treated as a synonym of *M. leda* by Larsen (1991; 2005a).

fulvescens Guénée, 1863 (as var? of *Cyllo*). *In* Maillard, L., *Notes sur l’Ile de la Reunion* 2: 15 (1-72). Paris. [2nd edition]. Reunion; Madagascar.

africana Fruhstorfer, 1908 (as ssp. of *Melanitis leda*). *Entomologische Zeitschrift. Frankfurt a. M.* 22: 87 (85-87). Zimbabwe: “Matebeleland”.

zitenides Fruhstorfer, 1908 (as f. of *Melanitis leda africana*). *Entomologische Zeitschrift. Frankfurt a. M.* 22: 87 (85-87). Africa.

plagiata Aurivillius, 1911 *in* Seitz, 1908-25 (as ab. of *Melanitis leda*). *Die Gross-Schmetterlinge der Erde*, Stuttgart (2) 13 *Die Afrikanischen Tagfalter*: 83 (614 pp.). Africa.

****Melanitis libya* Distant, 1882**
Violet-eyed Evening Brown

Melanitis libya Distant, 1882. *Annals and Magazine of Natural History* (5) 10: 405 (405-407).
Melanitis libya Distant, 1887. Dickson & Kroon, 1978. [date of authorship erroneous]
Melanitis libya Distant, 1887. Pringle *et al.*, 1994: 50. [date of authorship erroneous]



Melanitis libya. Male. Left – upperside; right – underside.
 Honde Valley, Zimbabwe. 23 March 1998.
 Images M.C. Williams ex J. Greyling Collection.



Melanitis libya. Female. Left – upperside; right – underside.
Honde Valley, Zimbabwe. 2 May 1996.
Images M.C. Williams ex J. Greyling Collection.

Type locality: [Tanzania]: “Masassi”.

Distribution: Senegal, Gambia, Guinea-Bissau (Aurivillius, 1910), Mali, Guinea, Sierra Leone, Liberia, Ivory Coast, Ghana, Nigeria, Niger, Gabon, Chad, Sudan (south), Uganda (north-west), Ethiopia, Kenya, Tanzania, Democratic Republic of Congo, Malawi, Zambia, Mozambique, Zimbabwe (east).

Specific localities:

Gambia – Walikunda, Basse (Jon Baker, pers. comm, May 2020).

Guinea – Ziama (Safian *et al.*, 2020).

Liberia – Wologizi (Safian *et al.*, 2020); Wonegizi (Safian *et al.*, 2020).

Ghana – Cape Three Points (Larsen, 2005a); Nakpanduri (Larsen, 2005a); Bobiri Butterfly Sanctuary (Larsen *et al.*, 2007).

Gabon – Waka (Vande weghe, 2010).

Democratic Republic of Congo – Ituri Forest (Ducarme, 2018).

Uganda – Semuliki N.P. (S. Forbes, pers. comm., 2015).

Kenya – coast (Larsen, 1991c); Shimba Hills (Larsen, 1991c); Tiriki (Larsen, 1991c); Kakamega (Larsen, 1991c).

Tanzania – Masassi (TL); Mpanda District (Kielland, 1990d); Kigoma District (Kielland, 1990d).

Malawi – Zomba Mountain (Congdon *et al.*, 2010).

Zambia – Ikelenge (Heath *et al.*, 2002); 85 km south of Mwinilunga (Heath *et al.*, 2002); Mufulira (Heath *et al.*, 2002); Kitwe (Heath *et al.*, 2002); Kundalila Falls (Heath *et al.*, 2002); South Luangwa Valley (Heath *et al.*, 2002); Kalungwishi River (Heath *et al.*, 2002).

Mozambique – Amatongas Forest (Pennington); Mount Chiperone (Timberlake *et al.*, 2007); Mt Inago (Congdon *et al.*, 2010); Mt Mecula [-12.0772 37.6297] (Congdon & Bayliss, 2013); Mt Yao [-12.4432 36.5114] (Congdon & Bayliss, 2013).

Zimbabwe – Pungwe Valley (van Son, 1962); Mount Darwin (Pinhey); Butler South in the Chitoras (Pennington); Bomponi, below the Vumba (Cooksons; male illustrated above); Pungwe Bridge (Dickson & Kroon, 1978); Harare (Marshall; single specimen).

Habitat: Forest at 600 to 900 m (Pringle *et al.*, 1994). Kielland (1990) and Heath *et al.* (2002) give woodland for Tanzania and Zambia, respectively. In Tanzania it occurs at altitudes from 800 to 2 200 m (Kielland, 1990d). Larsen (2005a) states that it has very broad ecological tolerances, being found in habitats ranging from subdesert to the wettest forests.

Habits: A generally scarce butterfly (Larsen, 2005a), with habits similar to those evinced by *Melanitis leda* (Pringle *et al.*, 1994).

Flight period: All year, with well-defined wet- and dry-season forms.

Early stages: Nothing published.

Larval food:

(Suspected to be) *Oxytenantha abyssinica* (A. Rich.) Munro (Poaceae) [Paré, 1993, personal communication, unpublished].

nyassae Bartel, 1905 (as ssp. of *Melanitis libya*). *Novitates Zoologicae* **12**: 130 (129-152). Tanzania: "N. Nyassa-See".

pinheyi van Son, 1962 (as f. of *Melanitis libya*). *Journal of the Entomological Society of Southern Africa* **25**: 140 (140-148). Zimbabwe: "Pungwe Valley".