

Genus *Lachnoptera* Doubleday, [1847] Leopards

In: Doubleday & Westwood, [1846-52]. *The genera of diurnal Lepidoptera*, London: pl. 22 (1: 1-250 pp.; 2: 251-534 pp.). London.

Type-species: *Papilio iole* Fabricius, by monotypy.

The genus *Lachnoptera* belongs to the Family Nymphalidae Rafinesque, 1815; Subfamily Heliconiinae Swainson, 1822; Tribe Algiini Grishin, 2023; Subtribe Lachnopterina Grishin, 2023. (Zhang *et al.* 2023. Butterfly classification and species discovery using genomics. *The taxonomic report of the international Lepidoptera survey* 11(3): 16).

Lachnoptera (**Leopards**) is an Afrotropical genus containing two species.

Lachnoptera anticlia (Hübner, [1819]) Western Leopard



Western Blotched Leopard (*Lachnoptera anticlia*). Left – male. Right – female. Ipassa, Gabon.
Images courtesy Raimund Schutte.

Issoria anticlia Hübner, [1819], *in* Hübner, [1816-1826]. *Verzeichniss bekannter Schmettlinge* 31 (432 + 72 pp.). Augsburg.
Lachnoptera anticlia (Hübner, 1819). Doubleday, 1847.



Lachnoptera anticlia. Male (Wingspan 50 mm). Left – upperside; right – underside.
Camp Kombo, Cameroon. 5 May 2019. J. Dobson.
Images M.C. Williams ex Dobson Collection.



Lachnoptera anticlia. Female. Left – upperside; right – underside.
Libreville, Gabon. 30 November 2017. J. Dobson.
Images M.C. Williams ex Dobson Collection.

Type locality: No locality given.

Diagnosis: Wingspan – male 58 mm; female 60 mm.

Distribution: Senegal, Guinea, Sierra Leone, Liberia, Ivory Coast, Ghana, Togo, Nigeria, Cameroon, Equatorial Guinea (Bioko), Gabon, Congo, Central African Republic, Angola, Democratic Republic of Congo, Sudan (south), Uganda, Kenya (west), Tanzania (north-west), Zambia (north-west).

Specific localities:

Senegal – Basse Casamance (Larsen 2005a; single record).

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

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

Ivory Coast – Abidjan (male illustrated above).

Ghana – Bobiri Butterfly Sanctuary (Larsen *et al.*, 2007).

Cameroon – Korup (Larsen 2005a).

Equatorial Guinea – Caldera de Luba, Bioko (Martin, 2015).

Gabon – Throughout (Vande weghe, 2010).

Central African Republic – Dzanga (Noss, 1998).

Democratic Republic of Congo – Mangmedjipa (Dufrane, 1945); Ituri Forest (Ducarme, 2018); Semuliki Valley (Ducarme, 2018); Central Forest Block (Ducarme, 2018); Mt Mitumba (Ducarme, 2018).

Uganda – Semuliki N.P. (Davenport & Howard, 1996); Mpanga Forest (Safian & Pyrcz, 2020).

Kenya – Kakamega (Larsen 2005a; intermittently sympatric with *L. ayresii* Trimen).

Tanzania – Mpanda and Kigoma Districts (Kielland, 1990d).

Zambia – Ikelenge (Heath *et al.*, 2002).

Habitat: Forest and forest margins, with some tolerance for habitat degradation (Larsen, 2005a). In Tanzania at altitudes of 800 to 1 500 m (Kielland, 1990d).

Habits: Flies in the forest understorey as well as on top of the canopy. The flight is rapid and in an up and down, dancing pattern (Larsen, 1991c). Both sexes are fond of flowers and males mudpuddle and come to urine patches (Larsen, 2005a). Larsen (2005a) notes that they will occasionally imbibe sweat on humans but that they are not much attracted to fruit-baited traps. Migration has been noted in the Democratic Republic of Congo by Fontaine (Larsen, 2005a).

Early stages: Nothing published.

Larval food:

Rawsonia lucida Harv. & Sond. (Flacourtiaceae) [Van Someren, 1974: 321].

Scottellia klaineana Pierre (Flacourtiaceae) [Vuattoux & Blandin, 1979; Ivory Coast; as *Scottellia chevalieri*].

laodice Cramer, 1777 (as sp. of *Papilio*). *Die Uitlandsche Kapellen voorkomende in de drie waereld-deelen Asia, Africa en America* **2**: 95 (151 pp.). Amsteldam & Utrecht. Guinea. [Invalid; junior primary homonym of *Papilio laodice* Pallas, 1771 [Nymphalidae].]

iole Fabricius, 1781 (as sp. of *Papilio*). *Species Insectorum* **2**: 78 (499 pp.). Hamburgi & Kilonii. Guinea. [Invalid; junior primary homonym of *Papilio iole* [Denis & Schiffermüller], 1775 [Nymphalidae].]

hecatea Hewitson, 1877 (as sp. of *Harma*). *Entomologist's Monthly Magazine* **13**: 277 (277-278). Ghana: "Ashanti".

afzelii Aurivillius, 1887 (as var. of *Lachnoptera iole*). *Öfversigt af Kongl. Vetenskaps-Akademiens Förhandlingar. Stockholm* **5**: 309 (305-314). Sierra Leone: "Sierra Leona". Holotype in the Swedish Natural History Museum (images available at www2.nrm.se/en/lep_nrm/i).

androchroma Bryk, 1913 (as female f. of *Lachnoptera iole*). *Societas Entomologia* **28**: 51 (51). Cameroon: "Kamerun".

pallens Dufrane, 1945 (as ab. of *Lachnoptera ayresii* [sic]). *Bulletin et Annales de la Société Royale Entomologique de Belgique* **81**: 98 (90-143). Democratic Republic of Congo: "Mangmedjipa".

Lachnoptera ayresii Trimen, 1879# Blotched Leopard



Blotched Leopard (*Lachnoptera ayresii*) in the Kenneth Stainbank Nature Reserve.
Left and right: Male upper- and underside. Centre: Female.
Images courtesy Steve Woodhall.

Lachnoptera ayresii Trimen, 1879. *Transactions of the Entomological Society of London* **1879**: 326 (323-346).

Lachnoptera ayresii Trimen, 1879. Trimen & Bowker, 1887a.

Lachnoptera ayresii Trimen. Swanepoel, 1953a.

Lachnoptera ayresii Trimen, 1879. Dickson & Kroon, 1978.

Lachnoptera ayresii Trimen, 1879. Pringle *et al.*, 1994: 124.



Lachnoptera ayresii. Male (Wingspan 49 mm). Left – upperside; Right – underside.
Lekgalameetse N.R., Limpopo, South Africa. 23 November 1997. M. Williams.
Images M.C. Williams ex Williams Collection.



Lachnoptera ayresii. Female (Wingspan 53 mm). Left – upperside; Right – underside.
Lekgalameetse N.R., Limpopo, South Africa. 5 January 2012. M. Williams.
Images M.C. Williams ex Williams Collection.



Lachnoptera ayresii. Female (pale form) (Wingspan 53 mm). Left – upperside; Right – underside.
Lekgalameetse N.R., Limpopo, South Africa. December 2005. M. Williams.
Images M.C. Williams ex Williams Collection.

Alternative common name: Eastern Blotched Leopard.

Type locality: [South Africa]: “Natal (Pinetown and Little Umhlanga)”.

Diagnosis: Wingspan – male 56 mm; female 60 mm.

Distribution: Kenya (mainly east of Rift Valley), Tanzania, Malawi, Zambia (Copperbelt and north-east), Mozambique, Zimbabwe (east), South Africa (Limpopo Province, Mpumalanga, KwaZulu-Natal, Eastern Cape Province), Swaziland (Duke *et al.*, 1999).

Specific localities:

Kenya – Ngong Forest (Larsen, 1991c); Kakamega Forest (Larsen 2005a).

Tanzania – Tukuyu in the south-west to eastern and northern parts (Kielland, 1990d); Ngezi Forest on Pemba Island (Kielland, 1990d); lower slopes of Mt. Kilimanjaro (Liseki & Vane-Wright, 2018).

Malawi – Mt Mulanje (Congdon *et al.*, 2010); Nyika N.P. (J. Timberlake, pers. comm., 2019).

Zambia – Mufulira (Heath *et al.*, 2002); Ndola (Heath *et al.*, 2002); Mpongwe (Heath *et al.*, 2002); Mbala (Heath *et al.*, 2002).

Mozambique – Mount Chipirone (Timberlake *et al.*, 2007); Mt Namuli (Congdon *et al.*, 2010); Mt Mabu (Congdon *et al.*, 2010); Mt Mecula [-12.0772 37.6297] (Congdon & Bayliss, 2013).

Zimbabwe – Laurenceville, Vumba (male illustrated above).

Limpopo Province – Lekgalameetse Nature Reserve (“Malta Forest”) (Swanepoel, 1953); Woodbush (Swanepoel, 1953); Entabeni Forest (Swanepoel, 1953); Louis Trichardt (Swanepoel, 1953).

Mpumalanga – Graskop (Swanepoel, 1953); Marieps Kop (Swanepoel, 1953).

KwaZulu-Natal – Pinetown (TL); Little Umlangha (Trimen, 1879); Oribi Gorge (Swanepoel, 1953); Durban (Swanepoel, 1953); Karkloof district (Swanepoel, 1953); Eshowe (Swanepoel, 1953); Kosi Bay Nature Reserve (Pringle & Kyle, 2002).

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

Habitat: Forest. In Tanzania it is found from sea-level to 2 000 m (Kielland, 1990d).

Habits: This is a common forest butterfly, that occasionally is abundant (Larsen, 1991c). The flight is brisk and restless as it flies along the edge of the forest (Pringle *et al.*, 1994). Males are sometimes seen defending territories from perches high up in trees (Larsen, 1991c) but more usually evince patrolling behaviour (Williams, unpub. obs.) Flowers are visited by both sexes (Larsen, 1991c). Males have been seen feeding on fresh cow-pats and sometimes alight on people in order to imbibe their sweat (Larsen, 1991c).

Flight period: All year (Pringle *et al.*, 1994).

Early stages:

Clark? and Van Someren, cited by Van Son, 1979: 10.

Vide Clark?: “Eggs not described. The larva is elongate, narrowed anteriorly, with dorso-lateral, lateral and subspiracular rows of thin and long dark setose processes except on first and last segments, the longest being those of the thoracic segments, where they are darker than on the abdominal segments. The colour of the larva appears to be light flesh-coloured with a reddish-brown back, striped with longitudinal lines of the ground colour. The pupa is about 20 mm long, light in colour, with two pairs of 6 mm long, hook-like diverging dorsal processes on the thorax, covered with very short bristles, with rosy-red bases, light fuscous stems and dark brown tips; seven rows (one middorsal and three lateral ones on each side) of acute and straight processes, of which the central row is reduced to short rosy-red tubercles, while the lateral processes are from 2,5-3 mm long, the longest being the most dorsally placed; all have rosy-red bases, light fuscous stems and some dark brown suffusions before the light tip.

Vide Van Someren: “The female lays freely on *Rawsonia lucida* Harv. It selects the young shoots on which to lay. The larvae move on to more mature leaves and when ready to pupate, they select an old leathery leaf in the shade and pupate on its underside. The larva is heavily spined (like that of *Acraea*); head black. Pupa also spined, general colour greenish or pinkish.”

Woodhall, 2013. *Metamorphosis* 24: 1-2.



Early stages of *Lachnoptera ayresii*. Left – egg. Centre – final instar larva. Right – pupa.
Images courtesy Steve Woodhall.

Larval food:

Rawsonia lucida Harv. & Sond. (Flacourtiaceae) [Platt, 1921: 100].

Rawsonia lucida Harv. & Sond. (Flacourtiaceae) [Van Someren, 1974: 321; as *Rawsonia usambarensis* Engl. and Gilg.].

Vismia orientalis Engl. (Hypericaceae) [Kielland, 1990d: 142].

Note: D'Abrera (2004: 260) maintains that *ayresii* is a subspecies of *antiglia* but does not formally (i.e. validly) emend its status.

abbotti Holland, 1896 (as var. of *Lachnoptera ayresii*). *Proceedings of the United States National Museum* **18**: 234 (229-258). "Eastern Africa".