

Genus *Salamis* Boisduval, 1833 Lilac Mother-of-Pearls

Nouvelles Annales du Muséum d'Histoire Naturelle, Paris 2: 194 (149-270).
Type-species: *Salamis augustina* Boisduval, by monotypy.

The genus *Salamis* belongs to the Family Nymphalidae Rafinesque, 1815; Subfamily Nymphalinae Rafinesque, 1815; Tribe Junoniini Reuter, 1896. The other genera in the Tribe Junoniini in the Afrotropical Region are *Junonia*, *Protogoniomorpha*, *Precis* and *Hypolimnna*.

Salamis (**Mother-of-Pearls**) is an Afrotropical genus containing four species.

**Salamis anteva* (Ward, 1870) Malagasy Lilac Mother-of-Pearl

Junonia anteva Ward, 1870. *Entomologist's Monthly Magazine* 6: 225 (224-228).
Salamis anteva (Ward, 1870). Ackery *et al.*, 1995.



Salamis anteva. Male. Left – upperside; right – underside.
Madagascar. March 2013.
Images M.C. Williams ex J. Lawrence Collection.



Salamis anteva. Female. Left – upperside; right – underside.
Madagascar.
Images M.C.Williams ex J. Greyling Collection.

Type locality: Madagascar: “Sud de Madagascar”.

Distribution: Madagascar.

Specific localities:

Madagascar – Marojejy (Duckworth *et al.*, 2009).

Habitat: Forest (Lees *et al.*, 2003).

Early stages: Nothing published.

Larval food: Nothing published.

Relevant literature:

Duckworth *et al.*, 2009 [Anthropophilous lachryphagy].

lambertoni Oberthür, 1923 (as var. of *Salamis anteva*). *Études de Lépidoptérologie Comparée* **21**: 121 (119-155). Madagascar: “Sud de Madagascar”. The status of this taxon, according to Lees *et al.* (2003), merits re-examination.

****Salamis augustina* Boisduval, 1833**
Island Lilac Mother-of-Pearl

Salamis augustina Boisduval, 1833. *Nouvelles Annales du Muséum d’Histoire Naturelle, Paris* **2**: 195 (149-270).

Type locality: Reunion: “Bourbon”; Mauritius: “Maurice”.

Distribution: Mauritius, Reunion.

General notes: Vinson (1938), Jenkins (1987) and Davis & Barnes (1991) give the spelling, incorrectly, as *angustina*. Manders (1908) attributes the decline of this species to the introduction of Indian myna birds.

Habits: Closely resembles the danaid *Euploea euphon*, of which it may be a mimic. The last recorded specimen from Mauritius was taken by Dr J. Bolton in August 1929 (Davis & Barnes, 1991).

Flight period: April and May for the nominate subspecies (Manders, 1908) and April to September for subspecies *vinsoni* (Vinson, 1938).

Early stages: Nothing published.

Larval food:

Sugar cane [Manders, 1908]. This seems very unlikely (MCW).

Obetia ficifolia (Urticaceae) [Henning, 2015 – in *Babbel Blues*, Issue no. 3].

Relevant literature:

Guillermet, 2003b [Biology notes; Reunion].

Salamis augustina augustina Boisduval, 1833
Island Lilac Mother-of-Pearl

Salamis augustina Boisduval, 1833. *Nouvelles Annales du Muséum d'Histoire Naturelle, Paris* **2**: 195 (149-270).

Type locality: Reunion: “Bourbon”; Madagascar; Mauritius: “Maurice”.

Distribution: Reunion.

Misattributed to Madagascar (“Nossi-Be” [Nosy Be]) and Mayotte by van Vollenhoven (1869) (Lees *et al.*, 2003).

Salamis augustina vinsoni Le Cerf, 1922
Mauritian Island Lilac Mother-of-Pearl

Salamis vinsoni Le Cerf, 1922. *Bulletin de la Société Entomologique de France* **1922**: 287 (287-288).

Type locality: Mauritius: “Moka, ile Maurice”.

Diagnosis: Distinguished from the nominotypical subspecies by the greater amount of purplish colouring on the upperside (Davis & Barnes, 1991).

Distribution: Mauritius.

Misattributed to the Madagascar fauna by Viette (1995) (Lees *et al.*, 2003).

Specific localities:

Mauritius – Moka (TL).

Note: May be extinct. Trimen (1866) knew of only two specimens. Vinson (1938) captured specimens between 1920 and 1923. The last recorded specimen from Mauritius was taken by Dr J. Bolton in August 1929 (Davis & Barnes, 1991). Henning (in *Babbel Blues*, Issue 3, 2015) states that the last specimen was captured in 1957.

**Salamis cacta* (Fabricius, 1793)
Lilac Mother-of-Pearl



Upper- and underside of the Lilac Mother-of-Pearl (*Salamis cacta*). Cameroon, May 2019.
Images courtesy Jeremy Dobson.

Papilio cacta Fabricius, 1793. *Entomologia Systematica emendata et aucta* **3** (1): 116 (488 pp.).

Salamis cacta (Fabricius, 1793). Pycz *et al.*, 2021.



Salamis cacta male. Left – upperside; right – underside.
Mabira Forest, Uganda. 1 July 2015. J. Dobson.
Images M.C. Williams ex Dobson Collection.



Salamis cacta female. Left – upperside; right – underside.
Mabira Forest, Uganda. 1 July 2015. J. Dobson.
Images M.C. Williams ex Dobson Collection.

Alternative common name: Lilac Beauty.

Type locality: Africa: “India”. [False locality]. Apparently it was described from Sierra Leone (Pringle *et al.*, 1994: 117).

Diagnosis: In the median area of the forewing upperside there is a large orange patch in *S. cacta*; this is smaller and less distinct in *S. amaninensis amaniensis* and absent in *Salamis amaniensis eileenae*; hindwing outer margin in *cacta* sharply angled at vein M_3 , in *amaniensis* less angled and in *eileenae* even less so; wing shape narrower in *eileenae* than in other two subspecies; *eileenae* smaller than other two taxa (Pringle *et al.*, 1994). The differences that are apparent in the male genitalia of the three taxa are discussed by Henning & Joannou (*in* Pringle *et al.*, 1994: 117, 118) and by Pycz *et al.*, 2021.

Distribution: Senegal (south-east), Guinea-Bissau (Bivar-de-Sousa *et al.*, 2016), Guinea, Sierra Leone, Liberia, Ivory Coast, Ghana, Togo, Benin (south), Nigeria (south and Cross River loop), Cameroon, Equatorial Guinea, Gabon, Congo, Central African Republic, Angola, Democratic Republic of Congo, Uganda, Rwanda, Ethiopia, Kenya (west), Tanzania (north-west).

Specific localities:

Senegal – Foret Classe de Djibelar (Underwood, *vide* Larsen, 2005a).

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

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

Ivory Coast – Bossematie (Larsen, 2005a).

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); Houeyogbe Forest (Coache & Rainon, 2016); see Coache *et al.*, 2017.

Nigeria – Oni Camp, Lagos district (Poulton, 1912).

Gabon – Throughout (Vande weghe, 2010).

Democratic Republic of Congo – Ru Ussorori (Bartel, 1905); Ituri Forest (Ducarme, 2018); Mt Mitumba (Ducarme, 2018).

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

Rwanda – Cyamudongo Forest (Uwizelimana *et al.*, 2021).

Tanzania – Mpanda and Kigoma (Kielland, 1990d); Mihumu Forest (common) (Kielland, 1990d).

Habitat: Forest, including disturbed forest habitats (Larsen, 2005a). In Tanzania *cacta* occurs in lowland forest, at altitudes from 800 to 1 250 m (Kielland, 1990d).

Habits: A relatively common butterfly (Larsen, 2005a). Usually flies in the forest canopy but occasionally descends to suck at damp patches on the ground, or to settle in the undergrowth. When sucking at damp patches the wings are repeatedly opened and closed. If disturbed they fly straight up into the tree-tops. At night they roost under leaves (Larsen, 2005a). Occasionally single individuals are seen to join migrations of other species (Larsen, 2005a).

Flight period: Probably flies all year in suitable localities, and does not seem to show any seasonal variation.

Early stages:

Poulton, 1912: lxxv (*Proc. R. Ent. Soc. Lond.*).

Lamborn found a number of young larvae on a single leaf, which suggests that the species lays its eggs in clusters. The larvae were collected at Oni Camp, Lagos District, Nigeria in October 1910 but the foodplant was not mentioned.

Larval food:

Scepocarpus hypselodendron (Hochst. ex A.Rich.) Wedd. (Urticaceae) [Van Someren, 1974: 318; as *Urera hypselodendron*].

Scepocarpus occidentalis (Urticaceae) [Vuattoux & Blandin, 1979; Ivory Coast; as *Urera occidentalis*].

Scepocarpus trinervis (Hochst.) Friis & Immelman (Urticaceae) [Van Someren, 1974: 318].

languida Bartel, 1905 (as ssp. of *Salamis cacta*). *Novitates Zoologicae* **12**: 135 (129-152). [Democratic Republic of Congo]: “Ostliches Central-Africa (Wald nordwestlich von Ru Ussorori)”.

strandii Röber, 1937 (as sp. of *Salamis*). *Festschrift zum 60. Geburtstage von Professor Dr. Embrik Strand. Riga* **2**: 525 (524-526). Ghana: “Goldküste”. Treated as a valid species of *Salamis* by D’Abrera, 2004: 276. Synonymized with *cacta* (Fabricius, 1793) by Larsen (2005a: 337).

****Salamis amaniensis* Vosseler, 1907**

Lilac Mother-of-Pearl

Salamis amaniensis Vosseler, 1907. *Deutsche Entomologische Zeitschrift* **1907**: 379 (379-380).

Salamis cacta amaniensis Vosseler, 1907. Dickson & Kroon, 1978.

Salamis cacta amaniensis Vosseler, 1907. Pringle *et al.*, 1994: 117.

Salamis amaniensis Vosseler, 1907. Pyrcz *et al.*, 2021. **Stat. rev.**

Type locality: [Tanzania]: “nahe dem Zusammen fluss des Kwamkuju mit dem Sigi”.

Diagnosis: In the median area of the forewing upperside there is a large orange patch in *S. cacta*; this is smaller and less distinct in *S. amaniensis amaniensis* and absent in *Salamis amaniensis eileenae*; hindwing outer margin in *cacta* sharply angled at vein M₃, in *amaniensis* less angled and in *eileenae* even less so;

wing shape narrower in *eileenae* than in other two subspecies; *eileenae* smaller than other two taxa (Pringle *et al.*, 1994). The differences that are apparent in the male genitalia of the three three taxa are discussed by Henning & Joannou (*in* Pringle *et al.*, 1994: 117, 118) and by Pycrz *et al.*, 2021.

Distribution: Kenya, Tanzania, Malawi, Mozambique, Zimbabwe, Comoro Islands.

Larsen (1991c: 344) records “Natal” [South Africa], in error (MCW).

Habitat: In Tanzania *amaniensis* occurs in lowland forest, at altitudes from 300 to 1 000 m (Kielland, 1990d). Subspecies *eileenae* is found in montane to submontane forest (Pringle *et al.*, 1994).

Habits: Usually flies in the forest canopy but occasionally descends to suck at damp patches on the ground, or to settle in the undergrowth. When sucking at damp patches the wings are repeatedly opened and closed. If disturbed they fly straight up into the tree-tops. In some years ssp. *eileenae* is abundant but in others it is rare (Pringle *et al.*, 1994).

Flight period: Probably flies all year in suitable localities, and does not seem to show any seasonal variation. Subspecies *eileenae* recorded from August to April (Pringle *et al.*, 1994).

Early stages:

Paré & Henning, G., *in* Pringle *et al.*, 1994: 118 [subspecies *eileenae*; Chirinda Forest, Zimbabwe].

“Rob Paré states that he bred this species from the Chirinda Forest [Zimbabwe] on *Urera cameroonensis* Wedd.: ‘A cluster of 52 salmon-pink eggs was laid on a stem, hatching after 6 days. The gregarious larvae spin a web and live on and around this in a very untidy manner. It was interesting to note that a few larvae died every time a new instar was reached, and those that died were always the smaller ones. It seemed that the largest larvae made the decision to stop feeding and moult, whereupon all the larvae stopped, even those that were not ready. These few did not moult, and when the others started feeding again, just sat and slowly died. Sixteen adults were the end result of the exercise, and the life history was recorded on 35 mm slides.’ The description of the larva and pupa are briefly as follows by G.A. Henning from slides by Joannou ex Paré larvae: Larva: The larva is long and of typical nymphalid shape. The earlier instars are charcoal black with short branched spines dorsally and dorso-laterally on each segment and numerous short brown setae. The body has a very slimy appearance. The head has two thick horns, about the same length as the head itself, with many very short spines. From the third instar it loses the slimy appearance but is otherwise similar to the earlier instars. In all instars the pro-legs are reddish brown. The final instar is dusky grey, the setae are pale ochreous brown, there are lighter patches dorsally and a darker line of the same colour. The spines are still black as is the headshield which is of similar shape to the earlier instars. Pupa: The pupa is attached by the cremastral hooks to a silken pad; it is short and broad, smoothly rounded over the abdomen, dorsally and laterally. The head is blunt. The colour is pale buff dorsally on the thorax and pale reddish brown dorsally on the abdomen, which is well covered with black striations. The thorax is ochreous brown with fine black striations over the wing cases with a pale patch along mid-margin. The thorax is projected into a large, blunt, ochre conical spine. The second and third abdominal segments are projected into two large dorso-lateral conical spines. The first pair are ochreous yellow, projecting forwards, the second pair are larger, straighter and reddish-brown and black in colour. There are further smaller, black, conical spines distally on the abdomen. There are very small, abdominal, orange-yellow, conical spines centrally along the dorsum and double on the first segment.”

Larval food:

Scopocarpus trinervis (Hochst.) Friis & Immelman (Urticaceae) [Pare, *in* Pringle *et al.*, 1994 (for subspecies *eileensis*); as *Urera cameroonensis* Wedd.].

Salamis amaniensis amaniensis Vosseler, 1907 Tanzanian Lilac Mother-of-Pearl

Salamis amaniensis Vosseler, 1907. *Deutsche Entomologische Zeitschrift* **1907**: 379 (379-380).

Salamis cacta amaniensis Vosseler, 1907. Dickson & Kroon, 1978.

Salamis cacta amaniensis Vosseler, 1907. Pringle *et al.*, 1994: 117.

Salamis amaniensis amaniensis Vosseler, 1907. Pycrz *et al.*, 2021. **Stat. rev.**

Type locality: [Tanzania]: “nahe dem Zusammen fluss des Kwamkuju mit dem Sigi”.

Distribution: Kenya (coast), Tanzania (north-east).

Specific localities:

Kenya – Shimba Hills (Larsen, 1991c); Voi area (Larsen, 1991c); Kibwezi (Larsen, 1991c).

Tanzania – Confluence of Kwamkuju and Sigi Rivers (TL); Amani in the eastern Usambaras (Kielland, 1990d); Kimboza Forest (Kielland, 1990d); Morogoro (Kielland, 1990d); Kanga Mountain (Kielland, 1990d); above Turiana in the Nguru Mountains (Kielland, 1990d).

Salamis amaniensis eileenae Henning & Joannou, 1994
Southern Lilac Mother-of-Pearl

Salamis cacta eileenae G.A. Henning and J.G. Joannou, 1994. *In*: Pringle, Henning & Ball [eds]. *Pennington's butterflies of southern Africa* 2nd edition: 117 (800pp.). Struik-Winchester, South Africa.
Salamis amaniensis eileenae Henning & Joannou, 1994. Pycrz *et al.*, 2021. **Stat. rev.**

Type locality: Zimbabwe: “Zimbabwe, Mt. Selinda, Dec. 1935, Van Son.” Described from 26 males and 13 females. Holotype in the Transvaal Museum, Pretoria.

Distribution: Malawi, Mozambique (west-central), Zimbabwe (east).

Specific localities:

Malawi – Port Herald (Gifford, 1965); Malawe Hills (Handman).

Mozambique – Maronga Forest (Pringle *et al.*, 1994); Xiluvo (Pringle *et al.*, 1994).

Zimbabwe – Mount Selinda (TL; Van Son); Witchwood Valley below the Vumba Mountains (Barnes).

Salamis amaniensis humbloti Turlin, 1994
Comoro Lilac Mother-of-Pearl

Salamis humbloti Turlin, 1993 and 1994. *Lambillionea* **93** (4) (Tome I): 361 (345-361), and *Lambillionea* **94** (4) (Tome II): 591 (591-601).

Salamis amaniensis humbloti Turlin, 1994. Pycrz *et al.*, 2021. **Stat. rev.**

Type locality: Comoro Islands: “Ouvanga, 3 km ouest de Moya, sud-ouest de l’île d’Anjouan, Comores, 50 m., 31.VII.1998 (B. Turlin).” Holotype in MNHN, Paris.

Distribution: Comoro Islands (Anjouan).

Specific localities:

Comoro Islands – Ouvanga, 3 km east of Moya, Anjouan (TL).