

Genus *Belenois* Hübner, [1819] Caper Whites

In: Hübner, [1816-[1826]. *Verzeichniss bekannter Schmettlinge* 92 (432 + 72 pp.). Augsburg.
Type-species: *Papilio calypso* Drury, by monotypy.

= *Anaphaeis* Hübner, 1819 *in* Hübner, [1816-[1826]. *Verzeichniss bekannter Schmettlinge* 93 (432 + 72 pp.). Augsburg. Type-species: *Papilio creona* Cramer, by subsequent designation (Scudder, 1875. *Proceedings of the American Academy of Arts and Sciences* **10**: 111 (91-293).).

= *Pseudohuphina* Stoneham, 1940. *Bulletin of the Stoneham Museum* (40): [4] ([4 pp.]).
Type-species: *Pieris raffrayi* Oberthür, by original designation.

= *Pseudanaphaeis* Bernardi, 1953. *Revue Française d'Entomologie* **20**: 50 (47-53). Type-species: *Pieris gidica* Godart, by original designation.

Synonym based on extralimital type-species: *Glycestha* Billberg.

The genus *Belenois* belongs to the Family Pieridae Swainson, 1820; Subfamily Pierinae Swainson, 1820; Tribe Pierini Swainson, 1820; Subtribe Aporiina Chapman, 1895. The other genera in the Subtribe Aporiina in the Afrotropical Region are *Dixeia* and *Mylothris*.

Belenois (**Caper Whites**) is a genus of 28 species, 27 of which occur in the Afrotropical Region and one in the Oriental Region. One of the Afrotropical species extends extraliminally.

Three subgenera are available (as proposed by Bernardi, 1953: 50) but are not consistently used, nor are they used in Ackery *et al.*, 1995. The three subgenera are: *Belenois* Hübner, 1819 (type species *Papilio calypso* Drury); *Anaphaeis* Hübner, 1819 (type species *Papilio creona* Cramer); *Pseudanaphaeis* Bernardi, 1953 (type species *Pieris gidica* Godart). A key to the subgenera of *Belenois* is given in Henning, Henning, Joannou & Woodhall, 1997 (*Living butterflies of southern Africa - Volume 1*: 327 (397 pp.). Umdaus Press, South Africa). Lees *et al.* (2003) retain the subgenera *Belenois* and *Pseudanaphaeis* but sink the subgenus *Anaphaeis* to *Belenois*.

**Belenois albomaculatus* (Goeze, 1779) Unknown Caper White

Papilio albomaculatus Goeze, 1779. *Entomologische Beyträge zu des Ritter Linné zwölften Ausgabe des Natursystems* **3** (1): 182 (390 pp.). Leipzig.

Type locality: No locality given.

Distribution: Tentatively placed here. The true status and position of this taxon is unknown; possibly not even Afrotropical (Ackery *et al.*, 1995: 199).

Early stages: Nothing published.

Larval food: Nothing published.

****Belenois aldabrensis* (Holland, 1896)**
Seychelles Caper White

Teracolus aldabrensis Holland, 1896. *Proceedings of the United States National Museum* **18**: 269 (265-273).



Belenois aldabrensis. Female. Left – upperside; right – underside.
Jakamaka Grove, Aldabra, Seychelles. July 1983. Gaetan du Chatnet. ABRI-2019-2894.
Images M. Williams ex ABRI Collection.



Belenois aldabrensis. Female. Left – upperside; right – underside.
Jakamaka Grove, Aldabra, Seychelles. July 1983. Gaetan du Chatnet. ABRI-2019-2894.
Images M. Williams ex ABRI Collection.

Type locality: Seychelles: “Aldabra”.

Distribution: Seychelles.

Specific localities: – Aldabra (Lawrence, 2014); Assumption (Lawrence, 2014); Astove (Lawrence, 2014).

Habits: The flight is fast and it is most active from 10h00 to 14h00 (Betts, 2000).

Flight period: All year, but commonest from September to March (Lawrence, 2014).

Early stages: Nothing published.

Larval food:

Morinda citrifolia [Le Grand, 1965; Aldabra].

****Belenois anomala* (Butler, 1881)**
Socotra Caper White

Synchlœ anomala Butler, 1881. *Proceedings of the Zoological Society of London* **1881**: 178 (175-180).



Belenois anomala. Male. Left – upperside; right – underside.
Above Hadibo, Socotra, Yemen. January 1994. SCC. ABRI-2019-2899.
Images M. Williams ex ABRI Collection.



Belenois anomala. Female. Left – upperside; right – underside.
Above Hadibo, Socotra, Yemen. January 1994. SCC. ABRI-2019-2900.
Images M. Williams ex ABRI Collection.

Type locality: Yemen: “Socotra”.
Distribution: Yemen (island of Socotra).
Early stages: Nothing published.
Larval food: Nothing published.

****Belenois antsianaka* (Ward, 1870)**
Malagasy Orange-tip Caper White

Pieris antsianaka Ward, 1870. *Entomologist's Monthly Magazine* 7: 30 (30-32).



Belenois antsianaka. Male. Left – upperside; right – underside.
Zombitse, Madagascar. 16-17 April 2018. J. Dobson.

Images M.C. Williams ex Dobson Collection.



Belenois antsianaka. Female. Left – upperside; right – underside.
Zombitse, Madagascar. 16-17 April 2018. J. Dobson.
Images M.C. Williams ex Dobson Collection.



Belenois antsianaka. Female. Left – upperside; right – underside.
Mt. D'Ambre, Diego Suarez, northn Madagascar. March 1990. SCC. ABRI-2019-2909.
Images M. Williams ex ABRI Collection.



Belenois antsianaka. Female. Left – upperside; right – underside.
Tsaratanana Mountain, north Madagascar. October 2003. SC, MC. ABRI-2019-2901.
Images M. Williams ex ABRI Collection.



Belenois antsianaka. Female. Left – upperside; right – underside.
Mt. D'Ambre, Diego Suarez, northern Madagascar. March 1990. SCC. ABRI-2019-2908.
Images M. Williams ex ABRI Collection.

Type locality: Madagascar.

Distribution: Madagascar.

Specific localities:

Madagascar – Salary (Grose-Smith & Kirby, 1892); Zombitse (male and female illustrated above).

Habitat: Forest margins and unnatural grassland (Lees *et al.*, 2003).

Early stages: Nothing published.

Larval food: Nothing published.

affinis Mabille, 1879 (as sp. of *Pieris*). *Bulletin de la Société Philomathique de Paris* (7) 3: 133 (132-144). Madagascar.

ramona Grose-Smith, 1891 (as sp. of *Pieris*). *Annals and Magazine of Natural History* (6) 7: 123 (122-128). Madagascar.

drurii Grose-Smith & Kirby, 1892 *in* Grose-Smith & Kirby, 1887-92 (as var. of *Belenois antsianaka*). *Rhopalocera exotica, being illustrations of new, rare and unfigured species of butterflies* 1: 1 (183 pp.). London. Madagascar: “Salary, Madagascar”.

persimilis Grose-Smith & Kirby, 1892 *in* Grose-Smith & Kirby, 1887-92 (as var. of *Belenois antsianaka*). *Rhopalocera exotica, being illustrations of new, rare and unfigured species of butterflies* 1: 2 (183 pp.). London. Madagascar: “Salary, Madagascar”.

aurantia Le Cerf, 1928 (as f. of *Pieris antsianaka*). *Encyclopédie Entomologique* (B. 3. Lepidoptera) 3: 120 (117-126). Madagascar: “Sud-Est de Madagascar”.

****Belenois aurota* (Fabricius, 1793)#**
Pioneer Caper White



Left: Mating pair of Pioneer Caper Whites (*Belenois aurota*). Image courtesy Peter Webb.
Centre and Right: Males of the Brown-veined White mudpuddling. Images courtesy Raimund Schutte.

Papilio aurota Fabricius, 1793. *Entomologia Systematica emendata et aucta* 3 (1): 197 (488 pp.).
Pieris mesentina Cramer. Trimen, 1862c. [Synonym of *Belenois aurota*]
Pieris mesentina (Cramer, 1782). Trimen & Bowker, 1889. [Synonym of *Belenois aurota*]
Belenois aurota Fabricius. Swanepoel, 1953a.
Belenois aurota (Fabricius, 1793). Dickson & Kroon, 1978.
Belenois (Anaphaeis) aurota (Fabricius, 1793). Pringle *et al.*, 1994: 295.



Belenois aurota. Male (Wingspan 43 mm). Left – upperside; right – underside.
Loding, Mpumalanga, South Africa. 1 May 2010. M. Williams.
Images M.C. Williams ex Williams Collection.



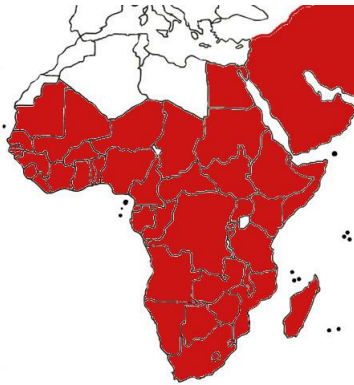
Belenois aurota. Male. Left – upperside; right – underside.
Lake Albert, Uganda. 7 June 2017. J. Dobson.
Images M.C. Williams ex Dobson Collection.



Belenois aurota. Female (Wingspan 46 mm). Left – upperside; right – underside.
Nylsvley Nature Reserve, Limpopo Province, South Africa. April, 2000. M. Williams.
Images M.C. Williams ex Williams Collection.

Alternative common name: Brown-veined White.

Type locality: India: “Coromandel [India]”.



Distribution of *Belenois aurota*

Mauritania, Senegal, Gambia, Mali, Guinea-Bissau, Guinea, Sierra Leone, Liberia, Ivory Coast, Burkina Faso, Ghana, Togo, Benin, Niger, Nigeria, Cameroon, Chad, Central African Republic, Equatorial Guinea, Gabon, Congo, Angola, Democratic Republic of Congo, Sudan, Uganda, Ethiopia, Eritrea, Somalia, Kenya, Tanzania, Rwanda, Burundi, Malawi, Zambia, Mozambique, Zimbabwe, Botswana, Namibia, South Africa, Swaziland, Lesotho. Extralimitaly in Egypt, Middle East, Israel, Lebanon, Afghanistan, Iran, India, Sri Lanka.

Distribution: Sub-Saharan Africa, including Mauritania, Senegal, Gambia, Mali, Guinea-Bissau (Aurivillius, 1910), Guinea, Sierra Leone, Liberia, Ivory Coast, Burkina Faso, Ghana, Togo, Benin (throughout), Niger, Nigeria, Cameroon, Chad, Central African Republic, Equatorial Guinea, Gabon, Congo, Angola, Democratic Republic of Congo, Sudan, Uganda, Ethiopia, Eritrea, Somalia, Kenya, Tanzania, Rwanda, Burundi, Malawi, Zambia, Mozambique, Zimbabwe, Botswana, Namibia, South Africa (Limpopo Province, Mpumalanga, North West Province, Gauteng, Free State Province, KwaZulu-Natal, Eastern Cape Province, Western Cape Province, Northern Cape Province), Swaziland, Lesotho. Also in Arabia and Madagascar.

Extralimitaly in Egypt, Middle East, Israel, Lebanon, Afghanistan, Iran, India, Sri Lanka.

Specific localities:

Gambia – Fajara, Abuko, Bijilo, Sanyang, Tintinto, Brufut, Basse, Kundam, Janjanbureh Island, Tendaba, Walikunda (Jon Baker, pers. comm., May 2020).

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

Benin – see Coache *et al.*, 2017.

Nigeria – Mkpot 1, Oban Hills (Larsen, 2005a).

Democratic Republic of Congo – Beni (Hulstaert, 1924); Ituri Forest (Ducarme, 2018); Semuliki Valley (Ducarme, 2018); Mt Mitumba (Ducarme, 2018); Mt Blue (Ducarme, 2018).

Sudan – Bahr el Ghazal (Strand, 1915).

Uganda – Semuliki N.P. (S. Forbes, pers. comm., 2017).

Tanzania – Throughout (Kielland, 1990d); Semdoe Forest Reserve (Doggart *et al.*, 2001); Katavi National Park (Fitzherbert *et al.*, 2006).

Mozambique – Mt Namuli (Congdon *et al.*, 2010); Mt Mabu (Congdon *et al.*, 2010).

Botswana – Widespread (Larsen, 1991); Serondela (Larsen, 1991); Gaborone (Larsen, 1991); Francistown (Larsen, 1991); Kanye (Larsen, 1991); Chobe area (Larsen, 1991).

Namibia – Swakopmund (Wallengren, 1860).

Limpopo Province – Doorndraai Dam Nature Reserve (Warren, 1990); Percy Fyfe Nature Reserve (Warren, 1990); Lekgalameetse Nature Reserve (“Malta Forest”); Highlands Wilderness (Bode & Bode, unpublished checklist); Nylsvley Nature Reserve (female illustrated above); Soetdoring Farm [-24.561 28.233] (A. Mayer, pers. comm. 2015); Bateleur Nature Reserve (Williams & Dobson, unpub., 2015); Buzzard Mountain Retreat [-23.012 29.765] (Williams, unpub., 2015).

Mpumalanga – Verloren Vallei Nature Reserve (Warren, 1990); Sterkspruit Nature Reserve (Williams); Buffelskloof Nature Reserve (Williams).

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

Gauteng – Witwatersrand Botanical Gardens (J. Dobson, unpublished checklist, 2001); Pretoria (male illustrated above).

Free State Province – Platberg, Harrismith (Dobson, Williams & Schutte, unpublished, 2010); Cyferfontein [-30.3736 25.8131] (R. Griesel, unpublished).

KwaZulu-Natal – Kosi Bay Nature Reserve (Pringle & Kyle, 2002); Tembe Nature Reserve (Pringle & Kyle, 2002); Ndumo Nature Reserve (Pringle & Kyle, 2002).

Northern Cape Province – Kagaligadi Transfrontier Park (van Son, 1959).

Swaziland – Mlawula N. R. (www.sntc.org.sz); Malolotja N. R. (www.sntc.org.sz).

Habitat: Savanna (moist to very dry) and open areas in the forest zone. In West Africa mainly in Sudan savanna. Also in karroid areas where larval host-plants are present. In Tanzania from sea-level to 2 600 m (Kielland, 1990d). In Madagascar in unnatural grassland and anthropogenic environments (Lees *et al.*, 2003).

Habits: A common, widespread migrant. The flight is fast and direct. Both sexes are attracted to flowers and males mudpuddle. Huge migrations are recorded nearly every year within the distribution range of the species (Pitman, 1928). In southern Africa these may occur from December to March or April and the flight direction is north-east (Henning, S.F. 1984). In the Free State Province and KwaZulu-Natal the direction of migration is in a roughly easterly direction (Pringle *et al.*, 1994). Migrations have also been noted on the Obudu Plateau in Nigeria by St Leger (Larsen, 2005a), Kenya (Larsen, 1977) and Oman (Larsen, 1982; Larsen, 2004). Odd specimens, presumably stragglers, are also frequently found in habitats devoid of their host-plants, e.g. the grasslands of South Africa. It has also been recorded as a summer migrant to the extreme south-west of the Western Cape Province (Pringle *et al.*, 1994). Kielland (1990) recounts finding a specimen sitting on the ground near the Kibo Hut on Mount Kilimanjaro, at an altitude of about 5 000 m.

Flight period: All year but commoner in the warmer months (Pringle *et al.*, 1994).

Early stages:

Horsfield & Moore, 1857: plate xii, figs. 9 and 9a [(Cat. Lep. E.I.C. Mus., i)].

Horsfield & Moore, 1865: 489. (Proc. Zool. Soc. Lond.).

Roberts, in Butler, 1880: 409. (Proc. Zool. Soc. Lond.).

Yerbury, in Butler, 1884: 492. [near Aden (Proc. Zool. Soc. Lond.)].

Yerbury, in Butler, 1886: 376. [near Aden (Proc. Zool. Soc. Lond.)].

Trimen & Bowker, 1889: 62. [as *Pieris Mesentina* (Cramer); Durban, KwaZulu-Natal].

“**Larva.** Pale-yellow, greenish on the back; a broad, brownish, lateral stripe from head to tail; head pinkish; a few short hairs near head and along the sides. **Pupa.** Sharply angulated, slender, head beaked. Light-brown, varied with darker-brown; a white, pink-spotted, longitudinal stripe on abdominal segments. Represented as suspended to the stalk of some plant. The above descriptions of larva and pupa are made from figures in Plate xii (f. 9, 9a) of Horsfield and Moore’s Catalogue of Lepidoptera in the East India Company’s Museum, vol. i.” “Colonel Yerbury, quoted by Mr. Butler in *Proc. Zool. Soc. Lond.*, 1884, p. 492, and 1886, p. 376, notes that near Aden he had reared caterpillars of this butterfly on *Capparis galeata*, and that in Western India they feed on a *Capparis* with dark-red blossom (*C. horrida*).”

“Mr. W.D. Gooch’s notes and outline sketches of the earlier stages of *Mesentina [aurota]* near D’Urban, in Natal, agree very fairly with the figures above described, and may be thus summarized, viz.: - **Larva.** Yellowish olive-green on back, marked down the middle with a double dark-brownish line; on each side a deep citrine-green stripe, bearing on each segment a minute yellow spot, - these lateral stripes inflict a little on eleventh segment, and join dorsally at their extremities on twelfth segment; below lateral stripes yellowish-green; just above legs with whitish-grey pubescence, inclining to form a tuft on each segment; on second segment two longer subdorsal tufts of similar hair projecting above the head. Head bright reddish-brown. **Pupa.** Very light-brownish, dorsally flecked with dark-brown; edges of wing-covers and part of neuration dark; angular projections on each side of dorsal base of abdomen black; lateral streaks of abdomen, and line along median dorsal carina of thorax white. Form quite like that of the pupa of *Severina* Cram. [= *B. creona*].”

Clark, in Van Son, 1949: 180.

Egg 0,9 to 1 mm high and 0,4 to 0,45 in diameter; elongate barrel-shaped; attenuate at micropylar end; 12 longitudinal ribs connected by about 28 cross-ridges; top generally rounded; white, changing to dull yellow; laid in clusters; egg stage 8 days. Five larval instars lasting 28 days. First instar larva yellow; 1,75 mm long; head 0,4 mm wide; anterior setae of the lateral ridge black on a black mole placed in a black patch; posterior setae smaller, black on black moles in a black patch. Later instars green with broad brown, later black, lateral stripe. Final instar with a conspicuous yellow mole below the spiracle of each segment; the moles on first segment with the long spines well separated; head dull green with brown, above edged with black; the green colour extends over the adfrontals to form an inverted ‘V’; before pupation larva becomes plain watery green. Three main colour forms: 1. Broad yellowish stripe over dorsum with faint dorsal line edged with pale brown or green; deep black lateral stripe; pale yellow spiracular stripe edged with brown below; ventrally white with light brown and green markings. 2. Broad dull yellow stripe over dorsum, with brown dorsal line edged with brown; brownish black

lateral stripe; pale yellow spiracular stripe; white ventrally, mottled with brown. 3. Broad brown stripe edged with light brown over dorsum, with a blue dorsal line; deep black lateral stripe; pale yellow spiracular line; ventrally whitish with brown mottling. Pupa 20 mm in length; rather narrow; cephalic projection very slightly upturned; lateral spines at base of abdomen small, broadly triangular and usually very dark throughout; sixth segment narrow, the projections not starting from its extreme edge; a medium-black projection beyond wing cases; usually traces of lateral and subdorsal stripes; pupal stage about 2 weeks but may be much longer under adverse conditions.. Colour of pupa variable: 1. Green with dull markings. 2. White with heavy black markings. 3. Almost colourless. 4. Pale brown with dark markings.

Carcasson, 1981 [larva and pupa].

Henning, S.F. 1984: 42.

Larsen, 1991c: 137.

“The larval foodplants...may often be wholly stripped by the larvae. Under such circumstances a large proportion of the pupae, normally chalk white with some black markings, become almost wholly black.”

Clark, in Pringle *et al.*, 1994: plate 20, p.378.

“The eggs are laid in clusters on the leaves of the foodplant. They are 0,5 mm in diameter by 0,9 mm high. When first laid, they are white, later becoming yellow. There are 12 to 14 longitudinal ribs and 24 to 28 cross ribs. The larva emerges from the side near the top of the egg and eats the discarded eggshell. The egg stage takes eight days. There are five larval instars with a duration of 28 days. The larvae are variable in colour. In the pre-pupal stage they become a plain, watery green. The pupa is attached, head upwards, by the cremastral hooks and a silken girdle around the middle. The pupal stage lasts about 14 days. The pupae are variable in colour.”

Henning, Henning, Joannou & Woodhall, 1997: 335 (photograph of final instar larva and pupa).



Belenois aurota. Stripped leaves and empty pupal cases on a *Boscia albitrunca* tree in the Kagalgadi Transfrontier Park.



Final instar larva of *Belenois aurota*. Image courtesy Reinier Terblanche.

Larval food:

Boscia albitrunca (Burch.) Gilg & Gilg-Ben. (Capparaceae) [Clark, *vide* Van Son, 1949: 180].

Boscia foetida Schinz (Capparaceae) [Larsen, 1991; Botswana].

Boscia oleoides (Burch. ex DC.) Toelken (Capparaceae) [Clark, *vide* Van Son, 1949: 180; as *Capparis oleoides*].

Cadaba fruticosa (Capparaceae) [Aluri & Rao, 2002; India].

Capparis fascicularis DC. (Capparaceae) [Henning, Henning, Joannou & Woodhall, 1997: 335].

Capparis cartilaginea Decne. (Capparaceae) [Yerbury, *in* Butler, 1884: 492, 1886: 376; near Aden; as *Capparis galeata*].

Capparis horrida (Capparaceae) [Yerbury, *in* Butler, 1884: 492, 1886: 376; in western India].

Capparis sepiaria L. (Capparaceae) [Pringle *et al.*, 1994: 295].

Capparis tomentosa Lam. (Capparaceae) [Larsen, 1991 (Botswana); Henning, Henning, Joannou & Woodhall, 1997: 335].

Maerua angolensis DC. (Capparaceae) [Larsen, 1991 (Botswana); Paré, *vide* Pringle *et al.*, 1994: 295].

Maerua cafra (DC.) Pax (Capparaceae) [Clark, *vide* Van Son, 1949: 180; as *Maerua triphylla* (Thunb.) Dur. and Schinz].

Maerua juncea Pax (Capparaceae) [Larsen, 1991 (Botswana); Paré, *vide* Pringle *et al.*, 1994: 295].

Maerua rosmarinoides (Sond.) Gilg & Gilg-Ben. (Capparaceae) [Otto *et al.*, 2013: 72].

Ritchiea species (Capparaceae) [Kielland, 1990d: 60].

Relevant literature:

Campbell, 2014 [Migration in UAE].

Gillett & Naseer, 2005 [Aberrant specimen; Oman].

mesentina Cramer, 1780 *in* Cramer, [1779-80] (as sp. of *Papilio*). *Die Uitlandsche Kapellen voorkomende in de drie waerreldeelen Asia, Africa en America* 3: 140 (176 pp.) Amsteldam & Utrecht. India: “Côte de Coromandel. [Invalid; junior primary homonym of *P. mesentina* Cramer, [1777] [Nymphalidae].]

augusta Olivier, 1807 (as sp. of *Papilio*). *Atlas pour servir au voyage dans l'Empire Othoman, l'Egypt et la Perse* (2): pl. 33 (pls 18-33). Paris. “Cote de Syrie”.

syrinx Wallengren, 1860 (as sp. of *Pinacopteryx*). *Wiener Entomologische Monatschrift* 4: 34 (33-46). Namibia: “Ad Swakop Africae”. Holotype in the Swedish Natural History Museum (images available at www2.nrm.se/en/lep_nrm/s).

lordaca Walker, 1870 (as sp. of *Pieris*). *Entomologist* 5: 48 (48-57). Ethiopia?: “Harkeko”.

auriginea Butler, 1886 (as sp. of *Belenois*). *Proceedings of the Zoological Society of London* 1886: 374 (355-395). India: “Campbellpore”.

iris Gauckler, 1912 (as ab. of *Pieris mesentina*). *Societas Entomologica* 27: 76 (76-77). Israel: “Palästina, Jerusalem”.

sulphurea Gauckler, 1912 (as ab. of *Pieris mesentina*). *Societas Entomologica* 27: 76 (76-77). Israel: “Palästina, Jerusalem”.

pusillima Strand, 1915 (as f. of *Pieris mesentina*). *Archiv für Naturgeschichte* 80 (A.10.): 106 (95-112). Sudan: “Bahr el Ghazal”.

punctifera Hulstaert, 1924 (as ab. of *Pieris mesentina*). *Revue de Zoologie et de Botanique Africaine* 12: 96 (90-99). Democratic Republic of Congo: “Beni”. Holotype in the Royal Museum for Central Africa, Tervuren, Belgium.

****Belenois calypso* (Drury, 1773)**
Calypso Caper White

Papilio calypso Drury, 1773. *Illustrations of Natural History* 2: index et 32 (90 pp.). London.



Belenois calypso calypso. Male. Left – upperside; right – underside.
Coldwater (top), Liberia. 13 January 2014. J. Dobson.
Images M.C. Williams ex Dobson Collection.



Belenois calypso calypso. Female. Left – upperside; right – underside.
Casamance, Senegal. November 1991. SCC. ABRI-2019-2882.
Images M.C. Williams ex ABRI Collection.



Belenois calypso calypso. Female. Left – upperside; right – underside.
Suhin, south-west Ghana. June 2009. RV. ABRI-2019-2883.
Images M.C. Williams ex ABRI Collection.



Belenois calypso calypso. Female. Left – upperside; right – underside.
Suhin, south-west Ghana. June 2009. RV. ABRI-2019-2884.
Images M.C. Williams ex ABRI Collection.

Alternative common name: Calypso Caper White.

Type locality: Sierra Leone: “Sierra Leon”.

Distribution: Senegal, Gambia, Guinea-Bissau (Aurivillius, 1910), Guinea, Sierra Leone, Liberia, Ivory Coast, Burkina Faso, Ghana, Togo, Benin (Fermon *et al.*, 2001), Nigeria, Cameroon, Gabon, Congo, Central African Republic, Democratic Republic of Congo, Angola, Uganda, Kenya, Tanzania.

Erroneously recorded from South Africa by Trimen, 1862c (MCW).

Habitat: Forest. In West Africa it occurs in dense Guinea savanna and open areas in the forest zone. It also follows broad rivers into dense forest (Larsen, 2005a).

Habits: The flight of this common butterfly is rapid and specimens fly high up. Males mudpuddle and both sexes are attracted to flowers (Larsen, 1991c). The species occasionally migrates, one such mixed migration in Lagos, Nigeria in late May, 1967 was recorded by Larsen (1968).

Early stages: Nothing published.

Larval food:

Cadaba species (Capparaceae) [Van Someren, 1974: 317].

Capparis species (Capparaceae) [Larsen, 1991c: 140].

Maerua species (Capparaceae) [Van Someren, 1974: 317].

Ritchiea species (Capparaceae) [Larsen, 1991c: 140].

Pristimera paniculata (Vahl) N.Hallé (Celastraceae) [Condamin, *vide* Larsen, 2005a (Basse Casamance, Senegal); oviposition only; as *Semirestis paniculata*].

Belenois calypso calypso (Drury, 1773)
Calypso Caper White

Papilio calypso Drury, 1773. *Illustrations of Natural History* 2: index et 32 (90 pp.). London.



Belenois calypso calypso. Male. Left – upperside; right – underside.
Coldwater (top), Liberia. 13 January 2014. J. Dobson.
Images M.C. Williams ex Dobson Collection.



Belenois calypso calypso. Female. Left – upperside; right – underside.
Casamance, Senegal. November 1991. SCC. ABRI-2019-2882.
Images M.C. Williams ex ABRI Collection.



Belenois calypso calypso. Female. Left – upperside; right – underside.
Suhin, south-west Ghana. June 2009. RV. ABRI-2019-2883.
Images M.C. Williams ex ABRI Collection.



Belenois calypso calypso. Female. Left – upperside; right – underside.
Suhin, south-west Ghana. June 2009. RV. ABRI-2019-2884.
Images M.C. Williams ex ABRI Collection.

Type locality: Sierra Leone: “Sierra Leon”.

Distribution: Senegal, Gambia, Guinea-Bissau (Aurivillius, 1910), Guinea, Sierra Leone, Liberia, Ivory Coast, Burkina Faso, Ghana, Togo, Benin (throughout), Nigeria.

Specific localities:

Gambia – Fajara, Abuko, Pirang, Bijilo, Sanyang, Keneba, Seleti (Jon Baker, pers. comm., May 2020).

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

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

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 (Tchiboza *et al.*, 2008); Houeyogbe Forest (Coache & Rainon, 2016); see Coache *et al.*, 2017.

Nigeria – Oban Hills (Larsen, 2005a).

fulvoacuminatus Goeze, 1779 (as sp. of *Papilio*). *Entomologische Beyträge zu des Ritter Linné zwölften Ausgabe des Natursystems* 3 (1): 120 (390 pp.). Leipzig. No locality given.

nigronotatus Goeze, 1779 (as sp. of *Papilio*). *Entomologische Beyträge zu des Ritter Linné zwölften Ausgabe des Natursystems* 3 (1): 182 (390 pp.). Leipzig. No locality given.

nigropictus Goeze, 1779 (as sp. of *Papilio*). *Entomologische Beyträge zu des Ritter Linné zwölften Ausgabe des Natursystems* 3 (1): 183 (390 pp.). Leipzig. No locality given.

lypsoca Berger, 1939 (as f. of *Belenois calypso*). *Mémoires du Musée Royal d'Histoire Naturelle de Belgique* (2) 15: 182 (181-207). Guinea?: “Conakry”?

cretacea Talbot, 1943 (as female f. of *Belenois calypso calypso*). *Annals and Magazine of Natural History* (11) 10: 317 (305-336). “Senegambia”.

***Belenois calypso dentigera* Butler, 1888**
Central Calypso Caper White

Belenois dentigera Butler, 1888. *Proceedings of the Zoological Society of London* 1888: 78 (56-85).



Belenois calypso dentigera. Male. Left – upperside; right – underside.
Nebobongo, Haut-Uele, DRC. 2 27N, 27 37E. 2 July 2014. T. Desloges.
Images courtesy Thomas Desloges.



Belenois calypso dentigera. Female. Left – upperside; right – underside.
Nebobongo, Haut-Uele, DRC. 2 27N, 27 37E. 1 July 2014. T. Desloges.
Images courtesy Thomas Desloges.

Type locality: [Democratic Republic of Congo]: “Stazione Gadda”.

Distribution: Cameroon, Gabon, Congo, Central African Republic, Democratic Republic of Congo

(except south and east), Angola (north-west).

Specific localities:

Cameroon – Korup (Larsen, 2005a).

Gabon – Kangwe (Vande weghe, 2010); Iguela (Vande weghe, 2010); Akaka (Vande weghe, 2010).

Central African Republic – Bangui (Schultze, 1914); Fort Crampel (Schultze, 1914); Jaunde (Gade, 1916); Tshangere River (Dufrane, 1948); Lusambo (Berger, 1981); Dzanga (Noss, 1998).

Democratic Republic of Congo – Gadda (TL); Région de Sasa (Hulstaert, 1924); Bili-Lebo (Hulstaert, 1924).

schweinfurthi Schultze, 1914 (as var. of *Pieris subeida*). *Entomologische Rundschau* **31**: 14 (13-14). Central African Republic: “Ubangi-Gebiet erbeutet bei Bangui; Fort Crampel”.

costimacula Gaede, 1916 (as var. of *Pieris calypso*). *Internationale Entomologische Zeitschrift* **9**: 109 (105-106, 109-112, 125-126). Cameroon: “N.O. Jaunde, Kamerun”.

flavida Hulstaert, 1924 (as female ab. of *Pieris calypso calypso*). *Revue de Zoologie et de Botanique Africaine* **12**: 96 (90-99). Democratic Republic of Congo: “Région de Sasa; Bili-Lebo”.

pulchricolor Hulstaert, 1924 (as female ab. of *Pieris calypso calypso*). *Revue de Zoologie et de Botanique Africaine* **12**: 96 (90-99). Democratic Republic of Congo: “Région de Sasa”.

tshangerensis Dufrane, 1948 (as f. of *Anapheis* [sic] *calypso dentigera*). *Bulletin et Annales de la Société Royale Entomologique de Belgique* **84**: 162 (160-168). Democratic Republic of Congo: “rivière Tshangere”.

aurae Berger, 1981 (as f. of *Belenois calypso dentigera*). *Les Papillons du Zaïre* 60 (543 pp.). Bruxelles. Democratic Republic of Congo: “Lusambo”. Holotype in the Royal Museum for Central Africa, Tervuren, Belgium.

***Belenois calypso marlieri* Berger, 1981
Congo Calypso Caper White**

Belenois calypso marlieri Berger, 1981. *Les Papillons du Zaïre* 60 (543 pp.). Bruxelles.

Type locality: [Democratic Republic of Congo]: “Bemba”. Holotype in the Royal Museum for Central Africa, Tervuren, Belgium.

Distribution: Democratic Republic of Congo (Maniema, Sankuru, Kivu).

Specific localities:

Democratic Republic of Congo – Bemba (TL); Ituri Forest (Ducarme, 2018); Central Forest Block (Ducarme, 2018).

***Belenois calypso minor* Talbot, 1943
Eastern Calypso Caper White**

Belenois calypso minor Talbot, 1943. *Annals and Magazine of Natural History* (11) **10**: 317 (305-336).

Type locality: [Uganda]: “Mabiri Forest, Chagwe, 3500-3800 feet”.

Distribution: Uganda, Kenya (west of the Rift Valley), Tanzania (north-west).

Specific localities:

Uganda – Mabira Forest (TL); Kalinzu Forest (Stoneham, 1957); Budongo Forest (Stoneham, 1957); Semuliki N.P. (Davenport & Howard, 1996).

Kenya – Malawa Forest (Stoneham, 1957); Kakamega Forest (Larsen, 1991c).

Tanzania – Kere Hill, Minziro (common) (Congdon & Collins, 1998); Munene Forest (rare) (Congdon & Collins, 1998).

butyrosa Talbot, 1943 (as f. of *Belenois calypso minor*). *Annals and Magazine of Natural History* (11) 10: 318 (305-336). Uganda: “Mabiri Forest, Chagwe, 3500-3800 feet”.

nausicaa Stoneham, 1957 (as female f. of *Belenois calypso*). *Bulletin of the Stoneham Museum* (69): [1] ([4 pp.]). Kenya: “Malawa Forest”.

helena Stoneham, 1957 (as female f. of *Belenois calypso*). *Bulletin of the Stoneham Museum* (69): [1] ([4 pp.]). Kenya: “Malawa Forest”.

alcestis Stoneham, 1957 (as female f. of *Belenois calypso*). *Bulletin of the Stoneham Museum* (69): [1] ([4 pp.]). Uganda: “Kalinzu Forest”.

alcimede Stoneham, 1957 (as female f. of *Belenois calypso*). *Bulletin of the Stoneham Museum* (69): [1] ([4 pp.]). Kenya: “Malawa Forest”.

alcippe Stoneham, 1957 (as female f. of *Belenois calypso*). *Bulletin of the Stoneham Museum* (69): [1] ([4 pp.]). Uganda: “Budongo Forest”.

****Belenois crawshayi* Butler, 1894**
Black-spotted Caper White

Belenois crawshayi Butler, 1894. *Proceedings of the Zoological Society of London* 1893: 665 (643-684).



Belenois crawshayi. Male. Left – upperside; right – underside.
Lubowa, Uganda. 0 13N, 32 33E. 21 August 2014. T. Desloges.
Images courtesy Thomas Desloges.



Belenois crawshayi. Male. Left – upperside; right – underside.
Masai Mara, Kenya. February 2002. ABRI-2019-2859.
Images M.C. Williams ex ABRI Collection.



Belenois crawshayi. Female. Left – upperside; right – underside.
Lubowa, Uganda. 0 13N, 32 33E. 21 August 2014. T. Desloges.
Images courtesy Thomas Desloges.



Belenois crawshayi. Female. Left – upperside; right – underside.
Masai Mara, Kenya. July 2002. SCC. ABRI-2019-2861.
Images M.C. Williams ex ABRI Collection.



Belenois crawshayi. Female. Left – upperside; right – underside.
Isale, Kivu, Democratic Republic of Congo. March 2013. ABRI-2019-2860.
Images M.C. Williams ex ABRI Collection.

Alternative common name: Crawshay’s Caper White.

Type locality: [Zambia]: “Lake Mweru”.

Diagnosis: Similar to *B. zochalia* but on the forewing upperside there is a discrete black spot at the end of the cell (in *zochalia* this mark extends to the costa) (Kielland, 1990d).

Distribution: Angola, Democratic Republic of Congo (east), Uganda, Rwanda, Burundi, Kenya (west), Tanzania, Malawi, Zambia.

Specific localities:

Angola – N’Dalla Tando, 2700 feet (Talbot, 1943).

Democratic Republic of Congo – Quango (Heyn, 1904); Kambove (Talbot, 1943); Muana River (Dufrane, 1948); Ituri Forest (Ducarme, 2018); Semuliki Valley (Ducarme, 2018); Mt Mitumba (Ducarme, 2018).

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

Kenya – South Kavirondo (Larsen, 1991c); Kakamega (Larsen, 1991c); Mt Elgon (Larsen, 1991c); Nandi (Larsen, 1991c).

Tanzania – Bismarckburg, southern Tanzania (Strand, 1911); Kigoma and Mpanda Districts (Kielland, 1990d); Katavi National Park (Fitzherbert *et al.*, 2006).

Zambia – Lake Mweru (TL); Lufupa River, Lualaba district (Neave, 1910); Kalombo Falls (Heath *et al.*, 2002); Kasempa? (Heath *et al.*, 2002); Mwinilunga? (Heath *et al.*, 2002); Chisamba (male illustrated above).

Habitat: Woodland and forest margins (Kielland, 1990d). Wet forests in Kenya (Larsen, 1991c). In *Brachystegia* woodland according to Heath *et al.* (2002). In Tanzania at altitudes from 780 to 1 400 m (Kielland, 1990d).

Habits: Flies high and fast but males mudpuddle and both sexes readily come to flowers (Larsen, 1991c).

Early stages: Nothing published.

Larval food:

Capparis species (Capparaceae) [Larsen, 1991c: 139].

continentalis Heyn, 1904 (as sp. of *Pieris*). *Entomologische Zeitschrift. Frankfurt. a.M.* **18**: 57 (57-58). Democratic Republic of Congo: “Quango”.

lata Neave, 1910 (as f. of *Belenois crawshayi*). *Proceedings of the Zoological Society of London* **1910**: 62 (2-86). Zambia: “Lufupa River, Lualaba district”.

pygmaeana Strand, 1911 (as ab. of *Pieris crawshayi*). *Mitteilungen aus dem Zoologischen Museum in Berlin* **5**: 290 (275-304). Tanzania: “Bismarckburg, S. Tanganyika”.

sagittata Talbot, 1943 (as male f. of *Belenois zochalia crawshayi*). *Annals and Magazine of Natural History* (11) **10**: 310 (305-336). Democratic Republic of Congo: “S.E. Congo, Katanga, Kambove, 4000-5000 feet”.

flavistriga Talbot, 1943 (as f. of *Belenois zochalia crawshayi*). *Annals and Magazine of Natural History* (11) **10**: 311 (305-336). Angola: “N’Dalla Tando, 2700 feet”.

obscura Dufrane, 1948 (as f. of *Anapheis* [sic] *crawshayi lata*). *Bulletin et Annales de la Société Royale Entomologique de Belgique* **84**: 162 (160-168). Democratic Republic of Congo: “rivière Muana”.

decipiens Dufrane, 1948 (as f. of *Anapheis* [sic] *crawshayi lata*). *Bulletin et Annales de la Société Royale Entomologique de Belgique* **84**: 162 (160-168). Democratic Republic of Congo: “rivière Muana”.

juncta Dufrane, 1948 (as f. of *Anapheis* [sic] *crawshayi lata*). *Bulletin et Annales de la Société Royale Entomologique de Belgique* **84**: 162 (160-168). Democratic Republic of Congo: “rivière Muana”.

immaculata Dufrane, 1948 (as f. of *Anapheis* [sic] *crawshayi lata*). *Bulletin et Annales de la Société Royale Entomologique de Belgique* **84**: 162 (160-168). Democratic Republic of Congo: “rivière Muana”.

****Belenois creona* (Cramer, [1776])#**
African Caper White

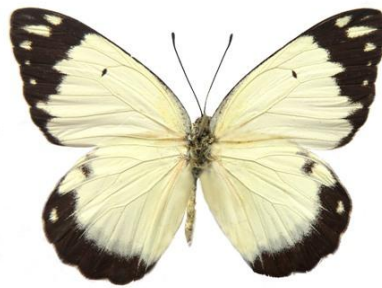


Male (Left) and female (right) African Caper White (*Belenois creona*).
Images courtesy Steve Woodhall.

Papilio creona Cramer, [1776] *in* Cramer, [1775-6]. *Die Uitlandsche Kapellen voorkomende in de drie waerrelddeelen Asia Africa en America 1*: 148 (16 + 155 pp.). Amsteldam & Utrecht.

Belenois creona Cramer. Swanepoel, 1953a.

Belenois (Anaphaeis) creona (Cramer, 1775). Pringle *et al.*, 1994: 295. [date of authorship erroneous]



Belenois creona creona. Male. Left – upperside; right – underside.
Bougounu, Mali. October 1990. SCC. ABRI-2019-2869.
Images M.C. Williams ex ABRI Collection.



Belenois creona creona. Female. Left – upperside; right – underside.
Nakpanduri, Ghana. August 1998. P. Walwanda. ABRI-2019-2870.
Images M.C. Williams ex ABRI Collection.

Alternative common name: African Caper White.

Type locality: “Indes Orientales”. [False locality; probably Sierra Leone or Senegal (Larsen, 2005a)].

Distribution: Senegal, Gambia, Guinea-Bissau (Bivar-de-Sousa *et al.*, 2016), Guinea, Sierra Leone, Burkina Faso, Liberia, Ivory Coast, Ghana, Togo, Benin (Fermon *et al.*, 2001), Nigeria, Niger, Sudan, Ethiopia, Eritrea, Somalia, Saudi Arabia, Yemen, Democratic Republic of Congo, Uganda, Kenya, Tanzania, Malawi, Angola, Zambia, Mozambique, Zimbabwe, Botswana, Namibia, South Africa,

Swaziland, Comoro Islands, Madagascar.

Recorded, in error, from the Cape Verde Islands (Tennent & Russel, 2019).

Habitat: Moist, frost-free savanna; also frequenting forest margins. In West Africa in Guinea and Sudan savanna but also agricultural lands in the forest zone (Larsen, 2005a). In Tanzania at altitudes from sea-level to 2 600 m (Kielland, 1990d). In Madagascar in unnatural grassland (Lees *et al.*, 2003).

Habits: A very common butterfly. Both sexes are relatively slow fliers when compared to other species of the genus. Both sexes are strongly attracted to flowers and males are often found mudpuddling (Pringle *et al.*, 1994). Larsen (1991) has recorded communal roosting at night, beneath fever trees, along water courses. Large migrations of this species, alone, have been recorded in some parts of its range. In Kenya and in South Africa it often migrates together with *Belenois aurota* (Larsen, 1991c; Pringle *et al.*, 1994) but may also participate in mixed migrations of up to a dozen different species (Larsen, 1991c). It was recorded as part of a mixed migration in northern Benin in April, 1978 by Larsen (1978).

Flight period: All year but scarcer in winter in more temperate areas (Pringle *et al.*, 1994).

Early stages:

Trimen & Bowker, 1889: 69 [as *Pieris severina* (Cramer)].

“**Larva.** Dull reddish-sandy on back, with a median longitudinal streak of violaceous-grey. On each side succeeds a wide ferruginous-brown stripe, followed by a narrow pale-yellow one, fringed inferiorly by thinly-set white hairs of moderate length. All the dorsal surface except the median streak shagreened with minute elevated whitish or yellowish dots arranged in transverse lines; also across the back of each segment (rather before its middle) a series of much larger widely-separated elevated and acuminate yellow dots, - six on the second, third, and fourth segments, and four on each of the others, - followed (a little beyond middle of each segment) by two similar dots. Ventral surface, including legs, pro-legs, and under part of head, pale greyish-green. Head above ferruginous, in front inferiorly yellowish; shagreened like dorsal surface, and with two or three larger acuminate spots on each side; inferiorly and laterally with some thinly-set white hairs like those on body. Length, 9 lin. In its earlier stages, down to a length of only 4½ lin., the larva is dorsally much tinged with greenish.

Pupa. Pale-brownish with a reddish tinge, or pale-creamy with a greenish tinge, superiorly more or less speckled with blackish. Cephalic process, dorsal ridge of thorax, and acute projections on each side of back of second abdominal segment, outlined with black. Blackish irroration in brownish specimens extending quite across back of each segment, only leaving clear a narrow incision-bar; but in creamy examples restricted so as to form four longitudinal series of small spots. Mixed with this irroration on each segment are three or four transverse series of minute whitish spots, and also towards the front of each segment a transverse row of larger elevated yellow spots (four on each abdominal segment, six or more on each thoracic one). Beneath creamy-white or greenish-white; wing-covers streaked with blackish along and near inner margin and also near hind-margin.

These descriptions of larva and pupa are made from numerous living specimens received from Colonel Bowker in August 1887, having been collected by him near D’Urban, Natal. The larvae had almost finished their supply of food by the time that they arrived, and I liberated them all except one which was suspended for pupation, and from which I obtained a ♀ *Severina* on the 9th September. Seven of the pupae received had the date of pupation attached, and I thus ascertained that the duration of the chrysalis state was from fourteen to seventeen days. The eight examples (three ♀, five ♂) that I reared from these Natalian pupae, as well as several others reared at the same time by Colonel Bowker and afterwards forwarded to me for comparison, were all of the rather smaller form, with duller-tinted under side marked by heavy blackish neuration, proper to the winter or dry season; but one of the ♂s that I reared was of the *Boguensis* variety, with a very completely developed oblique costal bar marking the extremity of the discoidal cell.”

Clark, in Van Son, 1949: 184.

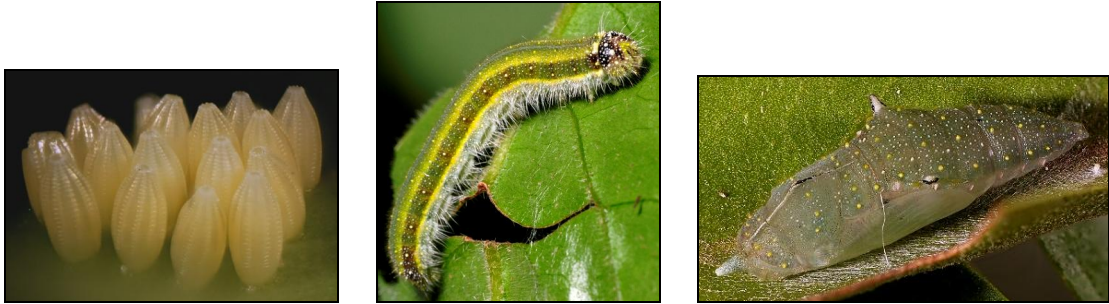
Egg elongate-conical; 0,95 mm high and 0,5 mm in diameter; white changing to pale yellow; 12 longitudinal ribs ending in slight points at the micropyle (unlike *B. aurota*, where the tip is rounded) and 25 cross-ridges; laid in clusters; egg stage 5 days. Five larval instars lasting about 17 days. First instar larva 1,75 mm in length; head 0,45 mm wide; second and third segments more humped than in *B. aurota*; anterior setae of lateral ridge brown on a white mole; posterior setae smaller but also brown on white moles; posterior spines of prolegs both brown (black in *B. aurota*); yellow, later changing to green. Final instar larva has the long spines on the moles of the first segment approximated and has three colour forms, with transitions: 1. green with blue dorsal line, generally with remains of dark lateral markings on last three segments; yellow spiracular line; whitish ventrally with blue-green blotches; head green with brown crown. 2. Broad dull green dorsal stripe, lightening to pale dull yellow at sides, with a blue dorsal line; sides blackish, which colour extends over the dorsum of the 12th segment; yellow spiracular line; bluish white ventrally; head greenish brown with black cap above; adfrontals yellow. 3. Yellowish green broad stripe over dorsum with blue dorsal line edged with green; sides dark green shading down to black on final segments; yellow spiracular line; whitish ventrally with blue markings. Before pupation larva is yellowish dorsally, black laterally. Pupa about 20 mm long; broader than *B. aurota* and with larger elongate-triangular lateral spines at base of abdomen; these spines are light coloured, edged with black;

cephalic projection straight or slightly downcurved; sixth segment broadest (narrow in *B. aurota*), and the projections start from its extreme edge; the projection beyond wing-cases small; colour variable – green, whitish or blackish; pupal stage from 14 to 30 days.

Clark, in Pringle et al., 1994: plate 21, p.380.

“White eggs are laid in clusters. They later become pale yellow. They are 0,5 mm in diameter and 0,95 mm high with 12 longitudinal ribs and about 25 cross ribs. The egg stage lasts about five days. There are five larval instars lasting about 17 days. The larvae are variable in colour. In the pre-pupal stage the dorsum is yellow and the sides are black. The pupa is also variable in colour. It is held upright by a silken girdle and attached by the cremastral hooks to a silken pad. The pupal stage varies from two weeks to a month.”

Henning, Henning, Joannou & Woodhall, 1997: 338 (photograph of final instar larva and pupa).



Belenois creona early stages. Left – eggs; centre – final instar larva; right – pupa.
Images courtesy Steve Woodhall.

Larval food:

Boscia albitrunca (Burch.) Gilg & Gilg-Ben. (Capparaceae) [Pringle et al., 1994: 296].

Boscia foetida Schinz (Capparaceae) [Nichols, 1995].

Boscia oleoides (Burch. ex DC.) Toelken (Capparaceae) [Clark, vide Van Son, 1949: 184; as *Capparis oleoides*].

Capparis fascicularis DC. var. *zeyheri* (Turcz.) Toelken (Capparaceae) [Van Son, 1949: 184; as *Capparis zeyheri* Turcz.].

Capparis sepiaria L. var. *citrifolia* (Lam.) Toelken (Capparaceae) [Pringle et al., 1994: 296].

Capparis tomentosa Lam. (Capparaceae) [Larsen, 1991 (Botswana); Paré, vide Pringle et al., 1994: 296].

Cleome species (Cleomaceae) [Kielland, 1990d: 61].

Maerua angolensis DC. (Capparaceae) [Seth-Smith, 1938 (Ghana); Pringle et al., 1994: 296].

Maerua cafra (DC.) Pax (Capparaceae) [Van Son, 1949: 184; as *Maerua triphylla* (Thunb.) Dur. and Schinz.].

Maerua juncea Pax (Capparaceae) [Larsen, 1991; Botswana].

Maerua racemulosa (A.DC.) Gilg & Gilg-Ben. (Capparaceae) [Platt, 1921].

Maerua rosmarinoides (Sond.) Gilg & Gilg-Ben. (Capparaceae) [Otto et al., 2013: 72].

Niebhuhria species (Capparaceae) [Larsen, 2005a].

Ritchiea species (Capparaceae) [Larsen, 2005a].

Belenois creona creona (Cramer, [1776])

African Caper White

Papilio creona Cramer, [1776] *in* Cramer, [1775-6]. *Die Uitlandsche Kapellen voorkomende in de drie waerreldeelen Asia Africa en America I*: 148 (16 + 155 pp.). Amsteldam & Utrecht.



Belenois creona creona. Male. Left – upperside; right – underside.
Bougounu, Mali. October 1990. SCC. ABRI-2019-2869.
Images M.C. Williams ex ABRI Collection.



Belenois creona creona. Female. Left – upperside; right – underside.
Nakpanduri, Ghana. August 1998. P. Walwanda. ABRI-2019-2870.
Images M.C. Williams ex ABRI Collection.

Type locality: “Indes Orientales”. [False locality; probably Sierra Leone or Senegal (Larsen, 2005a).

Distribution: Senegal, Gambia, Guinea-Bissau (Bivar-de-Sousa *et al.*, 2016), Guinea, Sierra Leone, Burkina Faso, Liberia, Ivory Coast, Ghana, Togo, Benin (throughout), Nigeria, Niger, Sudan, Ethiopia (west).

Specific localities:

Senegal – Villages of Sagna and Kounak (Dufrane, 1947).

Gambia – Fajara, Sanyang, Tintinto, Farasutu, Brufut, Bijilo, Abuko, Keneba, Sapu, Basse (Jon Baker, pers. comm., May 2020).

Guinea – Sigirri (Strand, 1909).

Benin – Noyau Central, Lama Forest (Fermon *et al.*, 2001); Lokoli (Tchibozo *et al.*, 2008); Houeyogbe Forest (Coache & Rainon, 2016); see Coache *et al.*, 2017.

Ethiopia – Adi-Ugri, Makallè (Cannaviello, 1900).

cneora Fabricius, 1793 (as sp. of *Papilio*). *Entomologia Systematica emendata et aucta* **3** (1): 191 (488 pp.). “Indes Orientales”. [*Lapsus* for *creona*]

ernestius Laporte, 1831 (as sp. of *Colias*). *Actes de la Société Linnéenne de Bordeaux* **4**: 147 (141-156). Senegal: “Sénégal”.

caeca Cannaviello, 1900 (as ab. of *Pieris creona*). *Bollettino della Società Entomologica Italiana* **32**: 293 (289-308). Ethiopia: “Adi-Ugri, Makallè”.

sigirrensis Strand, 1909 (as ab. of *Pieris severina*). *Archiv für Naturgeschichte* **75** (1.3.): 305 (303-311). Guinea: “Sigirri”.

houzeau Dufrane, 1947 (as ab. of *Anapheis* [sic] *creona*). *Bulletin et Annales de la Société Royale Entomologique de Belgique* **83**: 47 (46-73). Senegal: “sur la route Kaffrine-Konnegueul, entre les villages Sagna et Kounak, à 87 km. à l’Est de Kaolack, cercle de Kaolack, Ouest Sénégal”.

***Belenois creona benadirensis* (Storace, 1948)**
Somali African Caper White

Glycestha creona race *benadirensis* Storace, 1948. *Annali del Museo Civico di Storia Naturale (di Genova) Giacomo Doria* **63**: 263 (263-265).

Type locality: Somalia: “Zona di Afgoi, Benadir, Somalia merid”.

Distribution: Somalia.

Specific localities:

Somalia – Benadir (TL).

***Belenois creona boguensis* (Felder & Felder, [1865])**
Abyssinian African Caper White

Pieris boguensis Felder & Felder, [1865] *in* Felder & Felder, [1865-7]. *Reise der Österreichischen Fregatte Novara* 173 (549 pp.). Wien.

Type locality: [Ethiopia]: “Bogos, Keren”.

Distribution: Ethiopia (east), Eritrea.

Specific localities:

Ethiopia – Bogos (TL); Agamsa (Ungemach, 1932).

mixta Ungemach, 1932 (as f. of *Pieris creona/severina*). *Mémoires de la Société des Sciences Naturelles (et Physiques) du Maroc* **32**: 31 (1-122). Ethiopia: “Agamsa”.

***Belenois creona elisa* (van Vollenhoven, 1869)**
Comoro African Caper White

Pieris elisa van Vollenhoven, 1869. *In*: Pollen, F.P.L. & Van Dam, D.C. *Recherches sur la Faune de Madagascar et de ses dépendances* (5): 12 (7-14).



Belenois creona elisa. Male. Left – upperside; right – underside.
Mayotte, Comoro Islands. August 1990. SCC. ABRI-2019-2871.
Images M.C. Williams ex ABRI Collection.



Belenois creona elisa. Female. Left – upperside; right – underside.
Mayotte, Comoro Islands. August 1990. SCC. ABRI-2019-2872.
Images M.C. Williams ex ABRI Collection.

Type locality: Comoro Islands: “Mayotte”.

Distribution: Comoro Islands.

Specific localities:

Comoro Islands – Mayotte (TL); Island of Johanna (Butler, 1879).

johannae Butler, 1879 (as sp. of *Belenois*). *Annals and Magazine of Natural History* (5) 3: 191 (186-192). Comoro Islands: “Island of Johanna”.

Belenois creona leucogyne Butler, 1885
Arabic African Caper White

Belenois leucogyne Butler, 1885. *Proceedings of the Zoological Society of London* 1884: 492 (478-503).

Type locality: Yemen: “Lahej, Haithalkim”.

Distribution: Saudi Arabia (south-west), Yemen.

Specific localities:

Ethiopia – Lahej (TL).

Belenois creona prorsus (Talbot, 1943)
Malagasy African Caper White

Anapheis [sic] *creona prorsus* Talbot, 1943. *Annals and Magazine of Natural History* (11) 10: 305 (305-336).



Belenois creona prorsus. Male. Left – upperside; right – underside.
Madagascar. March 2013.
Images M.C. Williams ex J. Lawrence Collection.



Belenois creona prorsus. Female. Left – upperside; right – underside.
Ifaty, Madagascar. 18-19 April 2018. J. Dobson.
Images M.C. Williams ex Dobson Collection.



Belenois creona prorsus. Female. Left – upperside; right – underside.
Zombitse, Madagascar. 16-17 April 2018. J. Dobson.
Images M.C. Williams ex Dobson Collection.

Type locality: Madagascar: “Madagascar, Maintirano, middle west coast, sea level”.

Distribution: Madagascar.

Specific localities:

Madagascar – Maintirano (TL); Andrahomana (Bernardi, 1951).

antonii Bernardi, 1951 (as f. of *Belenois creona prorsus*). *Naturaliste malgache* 2: 156 (155-157).
Madagascar: “Andrahomana”.

Belenois creona severina (Stoll, [1781])#

African Capar White

Papilio severina Stoll, [1781] in Stoll, [1780-2]. *Die Uitlandsche Kapellen voorkomende in de drie waerelddeelen Asia, Africa en America* 4 [part]: 95 (29-252). Amsteldam & Utrecht.

Pieris creona Cramer. Trimen, 1862c.

Pieris severina Cramer. Trimen, 1862c.

Pieris severina (Cramer, 1782). Trimen & Bowker, 1889.

Belenois creona severina (Stoll, 1781). Dickson & Kroon, 1978.

Belenois (Anaphaeis) creona severina (Stoll, 1781). Pringle *et al.*, 1994: 295.



Belenois creona severina. Male (Wingspan 43 mm). Left – upperside; right – underside.
Rustenburg Nature Reserve, North West Province, South Africa. 12 December 1999. M. Williams.
Images M.C. Williams ex Williams Collection.



Belenois creona severina. Male (dry season form) (Wingspan 42 mm). Left – upperside; right – underside.
Thabazimbi, Limpopo Province, South Africa. 26 May 2012. M. Williams.
Images M.C. Williams ex Williams Collection.



Belenois creona severina. Female (wet season form) (Wingspan 44 mm). Left – upperside; right – underside.
Cintsa East, Eastern Cape Province, South Africa; 20-31 December, 2001. M. Williams.
Images M.C. Williams ex Williams Collection.



Belenois creona severina. Female (dry season form) (Wingspan 42 mm). Left – upperside; right – underside.

Blyde River Canyon, Mpumalanga, South Africa. 20 May 2006. M. Williams.
Images M.C. Williams ex Williams Collection.



Belenois creona severina. Female. Left – upperside; right – underside.
Semuliki N.P., Uganda. 5 June 2017. J. Dobson.
Images M.C. Williams ex Dobson Collection.



Belenois creona severina. Female (melanic form) (Wingspan 47 mm). Left – upperside; right – underside.
Mabira Forest, Uganda. 14 June 2009. J. Dobson.
Images M.C. Williams ex Dobson Collection.

Type locality: [South Africa]: “Cap de Bonne Espérance”.

Distribution: Democratic Republic of Congo, Uganda, Kenya, Tanzania, Malawi, Angola, Zambia, Mozambique, Zimbabwe, Botswana, Namibia, South Africa (Limpopo Province, Mpumalanga, North West Province, Gauteng, KwaZulu-Natal, Eastern Cape Province, Western Cape Province – south-east), Swaziland.

Specific localities:

Democratic Republic of Congo – Elisabethville (Hulstaert, 1924); Haute-Uele, Madyu (Hulstaert, 1924); Rutschuru 1400-1600 m (Hulstaert, 1924); Londiani (Hulstaert, 1924); Mahokia (Hulstaert, 1924); Toro-Semliki (Hulstaert, 1924); Beni (Hulstaert, 1924); Kasindi (Hulstaert, 1924); Beni-Moera (Hulstaert, 1924); Madya (Hulstaert, 1924); Haut Uele (Hulstaert, 1924); Léopoldville, Beni Ogoué (Hulstaert, 1924); Kipuski, Haut-Katanga (Dufrane, 1947); Ituri Forest (Ducarme, 2018); Semuliki Valley (Ducarme, 2018); Mt Mitumba (Ducarme, 2018); Mt Blue (Ducarme, 2018).

Uganda – Wadelai (Butler, 1888); Msisi (Hulstaert, 1924); Semuliki N.P. (Davenport & Howard, 1996).

Kenya – Trans Nzoia (Stoneham, 1957).

Tanzania – Throughout (Kielland, 1990d); Bismarckburg, southern Tanzania (Strand, 1911); Msamwia (Strand, 1911); S. Ufipa, Kwera-See (Strand, 1911); Kitungula (Strand, 1911); Same (Stoneham, 1957); Katavi National Park (Fitzherbert *et al.*, 2006).

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

Mozambique – Mt Inago (Congdon *et al.*, 2010); Mt Namuli (Congdon *et al.*, 2010); Mt Mabu (Congdon *et al.*, 2010).

Botswana – Gaborone area (Larsen, 1991); Tuli Block (Larsen, 1991); Tswapong Hills (Larsen, 1991); Francistown (Larsen, 1991); Chobe (Larsen, 1991); Okavango (Larsen, 1991); Serondela (Larsen, 1991); Kasane (Larsen, 1991).

Limpopo Province – Throughout bushveld areas (Swanepoel, 1953); Doorndraai Dam Nature Reserve (Warren, 1990); Lekgalameetse Nature Reserve (“Malta Forest”); Highlands Wilderness (Bode & Bode, unpublished checklist); Soetdoring Farm [-24.561 28.233] (A. Mayer, pers comm. 2015); Bateleur Nature Reserve (Williams & Dobson, unpub., 2015); Buzzard Mountain Retreat [-23.012 29.765] (Williams, unpub., 2015).

Mpumalanga – Throughout bushveld areas (Swanepoel, 1953); Sterkspruit Nature Reserve (Williams); Buffelskloof Nature Reserve (Williams).

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

Gauteng – Throughout bushveld areas (Swanepoel, 1953); Witwatersrand Botanical Gardens (J. Dobson, unpublished checklist, 2001).

KwaZulu-Natal – Durban (Felder & Felder, 1865); Port Shepstone (Swanepoel, 1953); Pietermaritzburg (Swanepoel, 1953); Estcourt (Swanepoel, 1953); Greytown (Swanepoel, 1953); Eshowe (Swanepoel, 1953); Empangeni (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); Umhlanga Rocks (male illustrated above).

Eastern Cape Province – Port Elizabeth (Swanepoel, 1953); Grahamstown (Swanepoel, 1953); East London (Swanepoel, 1953); Butterworth (Swanepoel, 1953); Queenstown (Swanepoel, 1953); Katberg (Swanepoel, 1953); Bashee River (Swanepoel, 1953); Port St. Johns (Swanepoel, 1953); Cintsa East (female illustrated above).

Western Cape Province – Knysna (Swanepoel, 1953); Mossel Bay (Pringle *et al.*, 1994).

Swaziland – Mlawula N. R. (www.sntc.org.sz); Malolotja N. R. (www.sntc.org.sz).

agrippina Felder & Felder, 1865 *in* Felder & Felder, [1865-7] (as sp. of *Pieris*). *Reise der Osterreichischen Fregatte Novara* 173 (549 pp.). Wien. South Africa: “Port Natal”.

infida Butler, 1888 (as sp. of *Belenois*). *Proceedings of the Zoological Society of London* **1888**: 78 (56-85). Uganda: “Wadelai”.

msamwiana Strand, 1911 (as ab. of *Pieris severina*). *Mitteilungen aus dem Zoologischen Museum in Berlin* **5**: 290 (275-304). Tanzania: “Bismarckburg, S. Tanganyika; Msamwia; S. Ufipa, Kwera-See; Kitungula”.

guarani Köhler, 1923 (as sp. of *Pieris*). *Zeitschrift für Wissenschaftliche Insektenbiologie* **18** (Sonderbeilage): 15 (34 pp.). [Africa]: “Missionses”. [False locality.]

acutapex Hulstaert, 1924 (as male f. of *Pieris severina*). *Revue de Zoologie et de Botanique Africaine* **12**: 94 (90-99). Democratic Republic of Congo: “Elisabethville”. Holotype in the Royal Museum for Central Africa, Tervuren, Belgium.

burgeoni Hulstaert, 1924 (as female f. of *Pieris severina*). *Revue de Zoologie et de Botanique Africaine* **12**: 95 (90-99). Democratic Republic of Congo: “Haute-Uele, Madyu; Rutschuru 1400-1600 m; Londiani; Mahokia; Toro-Semliki; Beni”. Holotype in the Royal Museum for Central Africa, Tervuren, Belgium.

obscurissima Hulstaert, 1924 (as female f. of *Pieris severina*). *Revue de Zoologie et de Botanique Africaine* **12**: 95 (90-99). Democratic Republic of Congo: “Kasindi; Mahokia; Toro-Semliki; Beni-Moera; Madya; Haut Uele; Beni”; Uganda: “Msisi”. Holotype in the Royal Museum for Central Africa, Tervuren, Belgium.

subalba Hulstaert, 1924 (as f. of *Pieris creona*). *Revue de Zoologie et de Botanique Africaine* **12**: 95 (90-99). Democratic Republic of Congo: “Congo Belge, Léopoldville, Beni Ogoué”. Holotype in the Royal Museum for Central Africa, Tervuren, Belgium.

demaneti Dufrane, 1947 (as ab. of *Anapheis* [sic] *creona*). *Bulletin et Annales de la Société Royale Entomologique de Belgique* **83**: 48 (46-73). Democratic Republic of Congo: “Kipuski, Haut-Katanga”.

evrardi Dufrane, 1947 (as ab. of *Anapheis* [sic] *creona*). *Bulletin et Annales de la Société Royale Entomologique de Belgique* **83**: 48 (46-73). Democratic Republic of Congo: “Kipuski, Haut-Katanga”.

gnoma Dufrane, 1947 (as ab. of *Anapheis* [sic] *creona*). *Bulletin et Annales de la Société Royale Entomologique de Belgique* **83**: 48 (46-73). Democratic Republic of Congo: “Kipuski, Haut-Katanga”.

mombasica Stoneham, 1957 (as female f. of *Anapheis* [sic] *creona*). *Bulletin of the Stoneham Museum* (68): [3] ([4 pp.]). Kenya: “Mombasa”.

creonoides Stoneham, 1957 (as female f. of *Anapheis* [sic] *creona*). *Bulletin of the Stoneham Museum* (68): [3] ([4 pp.]). Tanzania: “Same, Tanganyika Territory”.

creontica Stoneham, 1957 (as male f. of *Anapheis* [sic] *creona*). *Bulletin of the Stoneham Museum* (68): [3] ([4 pp.]). Kenya: “Trans Nzoia”.

nigerrima Stoneham, 1957 (as female f. of *Anapheis* [sic] *creona*). *Bulletin of the Stoneham Museum* (68): [3] ([4 pp.]). Kenya: “Trans Nzoia”.

jocasta Stoneham, 1957 (as female f. of *Anapheis* [sic] *creona*). *Bulletin of the Stoneham Museum* (68): [3] ([4 pp.]). Kenya: “Trans Nzoia”.

megara Stoneham, 1957 (as female f. of *Anapheis* [sic] *creona*). *Bulletin of the Stoneham Museum* (68): [4] ([4 pp.]). Kenya: “Trans Nzoia”.

****Belenois diminuta* Butler, 1894**
Small Caper White

Belenois diminuta Butler, 1894. *Proceedings of the Zoological Society of London* **1893**: 666 (643-684).



Belenois diminuta. Male. Left – upperside; right – underside.
Ndola, Zambia. August 1981. RJ Murphy. ABRI-2019-2867.
Images M.C. Williams ex ABRI Collection.



Belenois diminuta. Female. Left – upperside; right – underside.
Mufulira, Zambia. August 2004. HS Staude. ABRI-2019-2868.
Images M.C. Williams ex ABRI Collection.

Type locality: [Democratic Republic of Congo/Zambia]: “Lake Mweru”.

Distribution: Democratic Republic of Congo (Shaba), Tanzania, Zambia (north and central).

Specific localities:

Democratic Republic of Congo – S.E. Congo, E. Luvua Valley, escarpment, 5 days north-east of Lake Mweru, 4000-5000 feet (Talbot, 1943).

Tanzania – Parumbira (Lanz, 1896).

Zambia – Lake Mweru (TL); Mufulira (Heath *et al.*, 2002); Ndola (Heath *et al.*, 2002); Kapiri Mposhi (Heath *et al.*, 2002); Chisamba (Heath *et al.*, 2002); Mumbwa (Heath *et al.*, 2002); Lusaka (Heath *et al.*, 2002); Mporokoso (Heath *et al.*, 2002); Samfya (Heath *et al.*, 2002); Mbala (Heath *et al.*, 2002); Kitwe (male illustrated above).

Habitat: Probably restricted to *Brachystegia* woodland (Heath *et al.*, 2002).

Early stages: Nothing published.

Larval food: Nothing published.

tanganjika Lanz, 1896 (as var. of *Belenois zochalia*). *Deutsche Entomologische Zeitschrift, Iris* **9**: 123 (113-147). Tanzania: “Parumbira”.

flavilla Talbot, 1943 (as female f. of *Belenois zochalia crawshayi*). *Annals and Magazine of Natural History* (11) **10**: 311 (305-336). Democratic Republic of Congo: “S.E. Congo, E. Luvua Valley, escarpment, 5 days north-east of Lake Mweru, 4000-5000 feet”.

****Belenois gidica* (Godart, [1819])#**
Pointed Caper White



Left: Male Pointed Caper White (*Belenois gidica*) mudpuddling. Centre: Male resting. Right: Male dry season form. Images courtesy Raimund Schutte (left) and Steve Woodhall (centre and right).



Yellow form and white form females of the Pointed Caper White. Images courtesy Steve Woodhall.

Pieris gidica Godart, [1819] *in* Latreille & Godart, [1819], [1824]. *Encyclopédie Méthodique*. Histoire Naturelle [Zoologie] 9 Entomologie: 131 (1-328 [1819], 329-828 [1824]). Paris.

Pieris gidica Godart. Trimen, 1862c.

Pieris gidica Godart, 1819. Trimen & Bowker, 1889.

Belenois gidica Godart. Swanepoel, 1953a.

Belenois gidica (Godart, 1819). Dickson & Kroon, 1978.

Belenois (Anaphaeis) gidica (Godart, 1819). Pringle *et al.*, 1994: 296.



Belenois gidica gidica. Male (Wet season form). Left – upperside; right – underside.
Zamaye, northern Cameroon. July 1993. SCC. ABRI-2019-2911.
Images M. Williams ex ABRI Collection.



Belenois gidica gidica. Male (Dry season form). Left – upperside; right – underside.
Adi, Ituri, DRC. 3 24N, 30 47E. 11 April 2014. T. Desloges.
Images courtesy Thomas Desloges.

Alternative common name: Pointed Caper White.

Type locality: No locality given.

Distribution: Sub-Saharan Africa, including Mauritania, Senegal, Gambia, Burkina Faso, Ghana, Ivory Coast (Warren-Gash, pers. comm., 2002), Benin, Nigeria, Niger, Cameroon, Ethiopia, Somalia, Uganda, Angola, Democratic Republic of Congo, Kenya, Tanzania, Malawi, Zambia, Mozambique, Zimbabwe, Botswana, Namibia, South Africa, Swaziland.

Habitat: Frost-free savanna. In West Africa in Sudan savanna and the Sahel (Larsen, 2005a). Also in *Brachystegia* woodland (Kielland, 1990d). In Tanzania at altitudes from near sea-level to 2 100 m (Kielland, 1990d).

Habits: At times this is a common butterfly. Males have a fast, direct flight while females fly more slowly and tend to keep to denser bush and undergrowth. Both sexes feed from flowers and males are often found mudpuddling. Specimens may settle on the ground (Pringle *et al.*, 1994). Weak migrations of this species are known to occur (Larsen, 1991c).

Flight period: All year but commonest in summer and autumn. There are distinct wet- and dry-season forms (Kielland, 1990d; Pringle *et al.*, 1994).

Early stages:

Clark, in Van Son, 1949: 189.

Egg elongate-conical; 1 mm high and 0,4 mm in diameter; bright red; laid singly; egg stage 10 days. Five larval instars lasting 30 days. First instar larva 1,75 mm long; pale yellow tinged with pinkish anteriorly. In later instars mottled with green; red lateral stripe later changing to dark green; main setae white; shape cylindrical, tapering to slightly forked posterior end; colour of final instar larva variable with two main forms: Light-coloured plain form, without reddish mottling and the yellow dorsal line consisting principally of enlarged yellow minor setae (the latter are not as well developed in the dark form); white marking on the 1st segment is merely a collection of white setae but in the spotted and red-capped form this is composed of a cluster of well-developed moles on a porcelain-white shield. Pupa broader than either *B. aurota* or *B. creona* with the wing-cases proportionally much larger; the lateral projections placed well behind the middle and the cephalic spine is acute and directed obliquely ventrad; colour green or dull cream; pupal stage 25 days.

Clark, in Pringle *et al.*, 1994: plate 22, p.382.

“The bright red eggs are laid singly on the leaves of the foodplant. They are 1 mm high by 0,4 mm in diameter. The egg stage lasts about 10 days. There are five larval instars lasting about a month. The final instar larvae are variable in colour. The pupae are attached by cremastral hooks and held upright by a silken girdle. The pupal stage lasts about 25 days.”

Henning, Henning, Joannou & Woodhall, 1997: 341 (photograph of final instar larva and pupa).



Egg and early instar larva of *Belenois gidica*. Images courtesy Allison Sharp.



Final instar larva and pupa of *Belenois gidica*. Images courtesy Allison Sharp.

Larval food:

Boscia species (Capparaceae) [Kielland, 1990d: 61].

Capparis brassii DC. (Capparaceae) [Platt, 1921].

Capparis fascicularis DC. (Capparaceae) [Platt, 1921].

Capparis sepiaria L. var. *citrifolia* (Lam.) Toelken (Capparaceae) [Van Son, 1949: 189; as *Capparis citrifolia* Lam.].

Capparis tomentosa Lam. (Capparaceae) [Larsen, 1991 (Botswana); Paré, *vide* Pringle *et al.*, 1994: 296].

Maerua cafra (DC.) Pax (Capparaceae) [Claassens, 2005].

Maerua species (Capparaceae) [Kielland, 1990d: 61].

Salvadora persica L. (Salvadoraceae) [Van Someren, 1974: 317; Sevastopulo, 1981].

Belenois gidica gidica (Godart, [1819])
Pointed Caper White

Pieris gidica Godart, [1819] *in* Latreille & Godart, [1819], [1824]. *Encyclopédie Méthodique*. Histoire Naturelle [Zoologie] 9 Entomologie: 131 (1-328 [1819], 329-828 [1824]. Paris.



Belenois gidica gidica. Male (Wet season form). Left – upperside; right – underside.
Zamaye, northern Cameroon. July 1993. SCC. ABRI-2019-2911.
Images M. Williams ex ABRI Collection.



Belenois gidica gidica. Male (Dry season form). Left – upperside; right – underside.
Adi, Ituri, DRC. 3 24N, 30 47E. 11 April 2014. T. Desloges.
Images courtesy Thomas Desloges.

Type locality: No locality given.

Distribution: Mauritania, Senegal, Gambia, Burkina Faso, Ghana, Ivory Coast (Warren-Gash, pers. comm., 2002), Benin (throughout), Nigeria (north), Niger, Cameroon, Angola, Democratic Republic of Congo.

Specific localities:

Gambia – Fajara, Farasutu, Abuko, Bijilo, Pirang, Tintinto, Yundum, Sukuta, Walikunda, Janjanbureh Island (Jon Baker, pers. comm., May 2020).

Burkina Faso – Poundou (Talbot, 1929).

Ghana – Shai Hills (Larsen, 2005a); Accra Plains (Larsen, 2005a).

Benin – see Coache *et al.*, 2017.

Angola – Loanda (Butler, 1898).

Cameroon – North Cameroons in the neighbourhood of Lake Chad (Aurivillius, 1910); Sidderi (Gaede, 1916).

Democratic Republic of Congo – Mahokia (Hulstaert, 1924); Ituri Forest (Ducarme, 2018); Semuliki Valley (Ducarme, 2018).

occidentis Butler, 1898 (as sp. of *Belenois*). *Transactions of the Entomological Society of London* 1898:

438 (431-438). Democratic Republic of Congo: “Congo”; Angola: “Loanda”.

tschadica Aurivillius, 1910 *in* Seitz, 1908-25 (as f. of *Pieris gidica*). *Die Gross-Schmetterlinge der Erde*, Stuttgart (2) **13 Die Afrikanischen Tagfalter**: 40 (614 pp.). Cameroon: “North Cameroons in the neighbourhood of Lake Chad”. Holotype in the Swedish Natural History Museum (images available at www2.nrm.se/en/lep_nrm/g).

sulphurea Gaede, 1916 (as var. of *Pieris gidica*). *Internationale Entomologische Zeitschrift* **9**: 105 (105-106, 109-112, 125-126). Cameroon: “Sidderi, Kamerun”.

masculina Hulstaert, 1924 (as female f. of *Pieris gidica*). *Revue de Zoologie et de Botanique Africaine* **12**: 96 (90-99). Democratic Republic of Congo?: “Mahokia”. Holotype in the Royal Museum for Central Africa, Tervuren, Belgium.

albata Talbot, 1929 (as female f. of *Anapheis* [sic] *gidica gidica*). *Bulletin of the Hill Museum, Witley* **3**: 227 (225-233). Burkina Faso: “Poundou”.

arida Talbot, 1929 (as female f. of *Anapheis* [sic] *gidica gidica*). *Bulletin of the Hill Museum, Witley* **3**: 227 (225-233). Burkina Faso: “Poundou”.

***Belenois gidica abyssinica* (Lucas, 1852)#
African Veined White**

Pieris abyssinica Lucas, 1852. *Revue et Magasin de Zoologie Pure et Appliquée* **4**: 328 (324-345).

Pieris abyssinica Lucas, 1852. Trimen & Bowker, 1889.

Belenois (*Anapheis*) *gidica* (Godart, 1819). Pringle *et al.*, 1994: 296.



Belenois gidica abyssinica. Male (wet season form) (Wingspan 52 mm). Left – upperside; right – underside.
Magadu, KwaZulu-Natal, South Africa. 9 November 2009. M. Williams.
Images M.C. Williams ex Williams Collection.



Belenois gidica abyssinica. Male; dry season form (Wingspan 49 mm). Left – upperside; right – underside.
Manoutsu, Limpopo Province, South Africa. 13 July, 1998. M. Williams.

Images M.C.Williams ex Williams Collection.



Belenois gidica abyssinica. Female (yellow wet season form) (Wingspan 52 mm). Left – upperside; right – underside.
Nibela Peninsula, KwaZulu-Natal, South Africa. 25 November 2010. M. Williams.
Images M.C. Williams ex Williams Collection.



Belenois gidica abyssinica. Female (pale yellow wet season form) (Wingspan 53 mm). Left – upperside; right – underside.
Bergpan, Limpopo Province, South Africa. 9 May 2010. M. Williams.
Images M.C. Williams ex Williams Collection.



Belenois gidica abyssinica. Female (white wet season form) (Wingspan 51 mm). Left – upperside; right – underside.
Nibela Peninsula, KwaZulu-Natal, South Africa. 23 November 2010. M. Williams.
Images M.C. Williams ex Williams Collection.



Belenois gidica abyssinica. Female (dry season form) (Wingspan 47 mm). Left – upperside; right – underside.
 Buzzard Mountain Retreat, Limpopo Province, South Africa. 21 September 2003. M. Williams.
 Images M.C. Williams ex Williams Collection.



Belenois gidica abyssinica. Female – male-like WSF. Left – upperside; right – underside.
 Mabelikwe, Limpopo Province, South Africa. 27 April 2010. J. Greyling.
 Images M.C. Williams ex Greyling Collection.



Belenois gidica abyssinica. Female – male-like DSF. Left – upperside; right – underside.
 Mabelikwe, Limpopo Province, South Africa. 19 July 2010. J. Greyling.
 Images M.C. Williams ex Greyling Collection.

Type locality: [Ethiopia]: “Abyssinie”.

Distribution: Ethiopia, Somalia, Uganda, Democratic Republic of Congo (south-east), Kenya, Tanzania, Malawi, Zambia, Mozambique, Zimbabwe, Botswana, Namibia (north), South Africa (Limpopo Province, Mpumalanga, KwaZulu-Natal, Eastern Cape Province, Western Cape Province – south-east), Swaziland.

Specific localities:

Ethiopia – Mahal Uonz (Storace, 1948).

Somalia – Somalie, sur les plateaux de Centre (Ungemach, 1932).

Uganda – S.E. Ruwenzori, 3500 feet (Talbot, 1943); Kalinzu Forest (Stoneham, 1957).

Democratic Republic of Congo – Rutschuru-Ebene (Rebel, 1914); Kivu, Kissenji (Talbot, 1943).

Tanzania – In most parts of the country (Kielland, 1990d); Katavi National Park (Fitzherbert *et al.*,

2006).

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

Mozambique – Mt Mecula [-12.0772 37.6297] (Congdon & Bayliss, 2013).

Botswana – Chobe area (Larsen, 1991); Okavango (Larsen, 1991); Francistown (Larsen, 1991; single record); Kuke Pan (R. Vane-Wright *vide* Larsen, 1991; single record); Shashe (G. Bailey *vide* Larsen, 1991; single record); Maun (Larsen, 1991); Kasane area (Larsen, 1991).

Limpopo Province – Mica (Swanepoel, 1953); Lekgalameetse Nature Reserve (“Malta Forest”) (Swanepoel, 1953); Mokeetzi (Swanepoel, 1953); Sibasa (Swanepoel, 1953); Waterpoort (Swanepoel, 1953); Saltpan (Swanepoel, 1953); Limpopo River (Swanepoel, 1953); Manoutsa; Buzzard Mountain Retreat [-23.012 29.765] (Williams, unpub., 2015).

Mpumalanga – Barberton (Swanepoel, 1953); Buffelskloof Nature Reserve (Williams).

KwaZulu-Natal – Oribi Gorge (Swanepoel, 1953); Durban (Swanepoel, 1953); Estcourt (Swanepoel, 1953); Empangeni (Swanepoel, 1953); St. Lucia Bay (Swanepoel, 1953); Mkuze (Swanepoel, 1953); Kosi Bay Nature Reserve (Pringle & Kyle, 2002); Tembe Nature Reserve (Pringle & Kyle, 2002); Ndumo Nature Reserve (Pringle & Kyle, 2002); Jozini (male wet season form illustrated above).

Eastern Cape Province – Hankey (Swanepoel, 1953); Port Elizabeth (Swanepoel, 1953); Grahamstown (Swanepoel, 1953); Port Alfred (Swanepoel, 1953); Zuurburg (Swanepoel, 1953); Queenstown (Swanepoel, 1953); Hogsback (Swanepoel, 1953); East London (Swanepoel, 1953); Kei River (Swanepoel, 1953); Bashee River (Swanepoel, 1953); Port St. Johns (Swanepoel, 1953).

Western Cape Province – Knysna (Swanepoel, 1953); Voorbaai, near Mossel Bay (G. van den Berg).

Swaziland – Balegane (Swanepoel, 1953); Mlawula N. R. (www.sntc.org.sz).

doubledayi Wallengren, 1857 (as sp. of *Pinacopteryx*). *Öfversigt af Kongl. Vetenskaps-Akademiens Förhandlingar. Stockholm* annis 1838-1845. *Collecta* (n.s.) **2** (4): 8 (55 pp.). South Africa: “Caffraria”. Holotype in the Swedish Natural History Museum (images available at www2.nrm.se/en/lep_nrm/d).

westwoodi Wallengren, 1857 (as sp. of *Pinacopteryx*). *Öfversigt af Kongl. Vetenskaps-Akademiens Förhandlingar. Stockholm* annis 1838-1845. *Collecta* (n.s.) **2** (4): 9 (55 pp.). South Africa: “Caffraria”.

allica Oberthür, 1878 (as sp. of *Pieris*). *Études d'Entomologie* **3**: 16 (1-48). “Lac de Tzana”.

simplex Rebel, 1914 (as ab. of *Pieris gidica* var. *westwoodi*). *Annalen des (K.K.) Naturhistorischen Museums. Wien* **28**: 226 (219-294). Democratic Republic of Congo: “Rutschuru-Ebene”.

pallida Gaede, 1916 (as var. of *Pieris gidica*). *Internationale Entomologische Zeitschrift* **9**: 106 (105-106, 109-112, 125-126). Rwanda?: “Kiwu, Deutsch-Ostafrika”.

texturata Ungemach, 1932 (as female f. of *Pieris gidica westwoodi*). *Mémoires de la Société des Sciences Naturelles (et Physiques) du Maroc* **32**: 28 (1-122). Somalia: “Somalie, sur les plateaux de Centre”.

crassilinea Ungemach, 1932 (as female f. of *Pieris gidica abyssinica*). *Mémoires de la Société des Sciences Naturelles (et Physiques) du Maroc* **32**: 30 (1-122). Ethiopia: “Abyssinie”.

nigrescens Talbot, 1943 (as male f. of *Anapheis* [sic] *gidica westwoodi*). *Annals and Magazine of Natural History* (11) **10**: 307 (305-336). Uganda: “S.E. Ruwenzori, 3500 feet”.

nigrifusa Talbot, 1943 (as female f. of *Anapheis* [sic] *gidica westwoodi*). *Annals and Magazine of Natural History* (11) **10**: 308 (305-336). Uganda: “S.E. Ruwenzori, 3500 feet”.

masformis Talbot, 1943 (as female f. of *Anapheis* [sic] *gidica westwoodi*). *Annals and Magazine of Natural History* (11) **10**: 308 (305-336). Uganda: “S.E. Ruwenzori, 3500 feet”.

subochracea Talbot, 1943 (as female f. of *Anapheis* [sic] *gidica westwoodi*). *Annals and Magazine of Natural History* (11) **10**: 308 (305-336). Democratic Republic of Congo: “Congo, Kivu, Kissenji”.

deficiens Dufrane, 1947 (as ab. of *Anapheis* [sic] *gidica occidentalis*). *Bulletin et Annales de la Société Royale Entomologique de Belgique* **83**: 47 (46-73). “Afrique Orientale”.

androides Storace, 1948 (as female f. of *Glycestha gidica westwoodi*). *Annali del Museo Civico di*

Storia Naturale (di Genova) Giacomo Doria **63**: 264 (263-265). Ethiopia: “Mahal Uonz (Scio, Abissinia, presso Let Marefià)”.

centralis Stoneham, 1957 (as ssp. of *Anapheis* [sic] *gidica*). *Bulletin of the Stoneham Museum* (68): [3] ([4 pp.]). Uganda: “Kalinzu Forest”.

***Belenois gidica hypoxantha* (Ungemach, 1932)**
Ethiopia Pointed Caper White

Pieris gidica hypoxantha Ungemach, 1932. *Mémoires de la Société des Sciences Naturelles (et Physiques) du Maroc* **32**: 27 (1-122).

Type locality: [Ethiopia]: “Gambela”.

Distribution: Ethiopia (Gambela area).

Note: Larsen (2005a) does not believe that this subspecies is valid but does not formally change its status.

****Belenois grandidieri* (Mabille, 1878)**
Malagasy Caper White

Pieris grandidieri Mabille, 1878. *Bulletin de la Société Entomologique de France* (5) **8**: 77 (75-77).



Belenois grandidieri. Male, wet season form. Left – upperside; right – underside.
Zombitse, Madagascar. 16-17 April 2018. M. Williams.
Images M.C. Williams ex Dobson Collection.



Belenois grandidieri. Male, dry season form. Left – upperside; right – underside.
Ambijarod, Madagascar. December 1972. ABRI-2019-2857.
Images M.C. Williams ex ABRI Collection.



Belenois grandidieri. Female, wet season form. Left – upperside; right – underside.
Zombitse, Madagascar. 16-17 April 2018. J. Dobson.
Images M.C. Williams ex Dobson Collection.



Belenois grandidieri. Female, dry season form. Left – upperside; right – underside.
Majunga, western Madagascar. January 1972. ABRI-2019-2858.
Images M.C. Williams ex ABRI Collection.

Type locality: Madagascar.

Distribution: Madagascar, Seychelles.

Specific localities:

Madagascar – Zombitse (male and female illustrated above).

Seychelles – Astove (Lionnet, 1970; a single pair).

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

Early stages: Nothing published.

Larval food: Nothing published.

voeltzkowi Karsh, 1900: 169 (as sp. of *Pieris*). [Get ref. - not in Ackery *et al.*, 1995] Madagascar. The status of this taxon is uncertain (Ackery *et al.*, 1995: 203).

****Belenois hedyle* (Cramer, 1777)**
Western Yellow Caper White

Papilio hedyle Cramer, 1777. *Die Uitlandsche Kapellen voorkomende in de drie waereld-deelen Asia, Africa en America* 2: 137 (151 pp.). Amsteldam & Utrecht.



Belenois hedyle hedyle. Male. Left – upperside; right – underside.
Shai Hills, Volta, Ghana. November 2008. SCC. ABRI-2019-2895.
Images M. Williams ex ABRI Collection.



Belenois hedyle rhena. Female. Left – upperside; right – underside.
Abidjan, Ivory Coast. ABRI-2019-2896.
Images M. Williams ex ABRI Collection.

Alternative common name: Western Yellow Caper White.

Type locality: “Indes Orientales”. [False locality.]

Distribution: Guinea-Bissau (Talbot, 1943), Guinea, Sierra Leone, Liberia, Ivory Coast, Ghana, Togo, Benin, Nigeria (west).

Habitat: The edges of drier forests (Larsen, 2005a).

Habits: May, at times, be common (Larsen, 2005a). Both sexes feed from flowers, such as those of *Lantana* (Larsen, 2005a).

Early stages: Nothing published.

Larval food: Nothing published.

Belenois hedyle hedyle (Cramer, 1777)
Western Yellow Caper White

Papilio hedyle Cramer, 1777. *Die Uitlandsche Kapellen voorkomende in de drie waereld-deelen Asia, Africa en America* 2: 137 (151 pp.). Amsteldam & Utrecht.



Belenois hedyle hedyle. Male. Left – upperside; right – underside.
Shai Hills, Volta, Ghana. November 2008. SCC. ABRI-2019-2895.
Images M. Williams ex ABRI Collection.

Type locality: “Indes Orientales”. [False locality.]

Distribution: Ghana (east), Togo, Benin (south), Nigeria (west).

Specific localities:

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

Nigeria – Lagos (Larsen, 2005a); Ibadan (Larsen, 2005a).

sordidiflavicans Goeze, 1779 (as sp. of *Papilio*). *Entomologische Beyträge zu des Ritter Linné zwölften Ausgabe des Natursystems* 3 (1): 182 (390 pp.). Leipzig. No locality given.

Belenois hedyle ianthe (Doubleday, 1842)

Bissau Western Yellow Caper White

Pieris ianthe Doubleday, 1842. *In*: Gray, J.E., *Zoological Miscellany*: 77 (73-78). London.

Belenois hedyle ianthe (Doubleday, 1842). Larsen, 2005a: 99, **stat. rev.**

Type locality: Sierra Leone.

Distribution: Guinea-Bissau (Talbot, 1943), Guinea, Sierra Leone.

Specific localities:

Guinea-Bissau – Bissau (Talbot, 1943).

Guinea – Farmorea (Talbot, 1943); Boké, Rio Nunez (Talbot, 1943); Fouta Djallon (Larsen, 2005a).

albunea Talbot, 1943 (as female f. of *Belenois ianthe*). *Annals and Magazine of Natural History* (11) 10: 322 (305-336). Guinea-Bissau: “Senegal coast, Bissau”.

albicans Talbot, 1943 (as female f. of *Belenois ianthe*). *Annals and Magazine of Natural History* (11) 10: 322 (305-336). Guinea: “French Guinea, Farmorea”.

arenosa Talbot, 1943 (as f. of *Belenois ianthe*). *Annals and Magazine of Natural History* (11) 10: 323 (305-336). Sierra Leone; Togo: “Togoland”.

popularis Talbot, 1943 (as f. of *Belenois ianthe*). *Annals and Magazine of Natural History* (11) 10: 323 (305-336). Guinea: “Boké, Rio Nunez”.

asseris Talbot, 1943 (as f. of *Belenois ianthe*). *Annals and Magazine of Natural History* (11) 10: 323 (305-336). Guinea: “French Guinea, Farmorea”.

Belenois hedyle rhena (Doubleday, 1846)

Ashanti Western Yellow Caper White

Pieris rhena Doubleday, 1846. *Annals and Magazine of Natural History* (1) 17: 24 (22-26).



Belenois hedyle rhenae. Female. Left – upperside; right – underside.
Abidjan, Ivory Coast. ABRI-2019-2896.
Images M. Williams ex ABRI Collection.

Type locality: Ghana: “Ashanti”.

Distribution: Sierra Leone, Liberia, Ivory Coast, Ghana (west).

Specific localities:

Ivory Coast – Dimbroko (Larsen, 2005a); Abengourou (Larsen, 2005a).

Ghana – Ashanti (TL); Coomassie, Odumase Swamp (Talbot, 1943).

fumosa Talbot, 1943 (as female f. of *Belenois hedyle*). *Annals and Magazine of Natural History* (11) **10**: 321 (305-336). Ghana: “Ashanti, Coomassie, Odumase Swamp”.

****Belenois helcida* (Boisduval, 1833)**
Malagasy Painted Caper White

Pieris helcida Boisduval, 1833. *Nouvelles Annales du Muséum d'Histoire Naturelle, Paris* **2**: 17 (149-270).



Belenois helcida. Male. Left – upperside; right – underside.
Andasibe, Madagascar. 27 March 2016. J. Dobson.
Images M.C. Williams ex Dobson Collection.



Belenois helcida. Female. Left – upperside; right – underside.
Andasibe, Madagascar. 5-7 April 2018. J. Dobson.
Images M.C. Williams ex Dobson Collection.

Type locality: Madagascar: “à Tamatave [Toamasina], à Tintingue et à Féneriffe [Fénérive-Est]”.

Distribution: Madagascar.

Specific localities:

Madagascar – Toamasina (TL); Tintingue (Boisduval, 1833); Fénerive-Est (Boisduval, 1833); Antananarivo (Butler, 1879); Anjajavy (R. Schutte, pers. comm. April 2010); Andasibe (male and female illustrated above).

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

Habits: Seen commonly at night by torchlight, roosting under leaves in thick forest (R. Schutte, pers. comm. April 2010).

Early stages: Nothing published.

Larval food: Nothing published.

albipennis Butler, 1879 (as sp. of *Belenois*). *Annals and Magazine of Natural History* (5) 4: 232 (227-246). Madagascar: “Antananarivo”.

**Belenois larima* (Boisduval, 1836)

Senegal Caper White

Pieris larima Boisduval, 1836. *in*: [Roret, Suites à Buffon] *Histoire naturelle des Insectes. Species général des Lépidopteres* 1: 524 (690 pp.). Paris.

Type locality: Senegal: “Sénégal”.

Distribution: Of doubtful status (Ackery *et al.*, 1995: 203). Treated by Aurivillius (1898 *in* Aurivillius, 1898-9) as the west African race of *B. thysa* (Hopffer) in which case it would have priority over *thysa*; however, Aurivillius (1910 *in* Seitz, 1908-25) treats *larima* as specifically distinct. Larsen (2005a: 99) regards this taxon to possibly be a natural hybrid and suggests that it should be treated as a *nomen dubium*.

**Belenois mabella* Grose-Smith, 1891

Malagasy Small Caper White

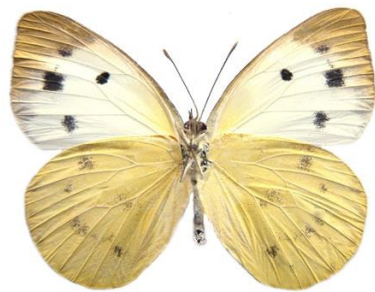
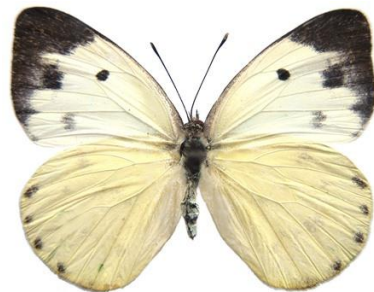
Belenois mabella Grose-Smith, 1891. *Annals and Magazine of Natural History* (6) 8: 79 (78-81).



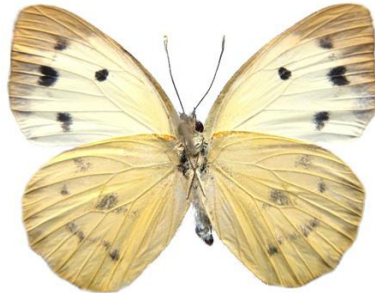
Belenois mabella. Male. Left – upperside; right – underside.
Zombitse, Madagascar. 16-17 April 2018. M. Williams.
Images M.C. Williams ex Dobson Collection.



Belenois mabella. Female. Left – upperside; right – underside.
Zombitse, Madagascar. 16-17 April 2018. J. Dobson.
Images M.C. Williams ex Dobson Collection.



Belenois mabella. Female. Left – upperside; right – underside.
Zombitse, Madagascar. 16-17 April 2018. J. Dobson.
Images M.C. Williams ex Dobson Collection.



Belenois mabella. Female. Left – upperside; right – underside.

Zombitse, Madagascar. 16-17 April 2018. M. Williams.
Images M.C. Williams ex Dobson Collection.

Type locality: Madagascar: “Mahobo, R. Morondava”.

Distribution: Madagascar.

Specific localities:

Madagascar – Mahobo, Morondava (TL).

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

Early stages: Nothing published.

Larval food: Nothing published.

mahobo Grose-Smith, 1891 (as sp. of *Belenois*). *Annals and Magazine of Natural History* (6) **8**: 80 (78-81). Madagascar: “Mahobo”.

****Belenois margaritacea* Sharpe, 1891**
Mountain Caper White

Belenois margaritacea Sharpe, 1891. *Proceedings of the Zoological Society of London* **1891**: 191 (187-194).



Belenois margaritacea margaritacea. Male. Left – upperside; right – underside.
Nyambeni, Kenya. April 1989. SCC. ABRI-2019-2849.
Images M.C. Williams ex ABRI Collection.



Belenois margaritacea margaritacea. Female. Left – upperside; right – underside.
Meru, Kenya. April 1989. SCC. ABRI-2019-2850.
Images M.C. Williams ex ABRI Collection.

Alternative common name: Margarita’s Caper White.

Type locality: [Kenya]: “Sotik”.

Distribution: Kenya, Tanzania.

Habitat: Montane forest. In Tanzania ssp. *plutonica* occurs at altitudes from 1 500 to 2 700 m and ssp.

intermedia from 1 100 to 2 200 m (Kielland, 1990d).

Habits: Flowers in the understorey, as well as in the forest canopy, are visited (Kielland, 1990d).

Early stages: Nothing published.

Larval food:

Capparis species (Capparaceae) [Larsen, 1991c: 139].

Maerua species (Capparaceae) [Van Someren, 1974: 317].

Ritchiea species (Capparaceae) [Larsen, 1991c: 139].

Belenois margaritacea margaritacea Sharpe, 1891

Mountain Caper White

Belenois margaritacea Sharpe, 1891. *Proceedings of the Zoological Society of London* **1891**: 191 (187-194).



Belenois margaritacea margaritacea. Male. Left – upperside; right – underside.
Nyambeni, Kenya. April 1989. SCC. ABRI-2019-2849.
Images M.C. Williams ex ABRI Collection.



Belenois margaritacea margaritacea. Female. Left – upperside; right – underside.
Meru, Kenya. April 1989. SCC. ABRI-2019-2850.
Images M.C. Williams ex ABRI Collection.

Type locality: [Kenya]: “Sotik”.

Distribution: Kenya (south-west).

Specific localities:

Kenya – Sotik (TL); Mwangoris (Larsen, 1991c); Mara (Larsen, 1991c).

Belenois margaritacea somereni (Talbot, 1928)

Meru Mountain Caper White

Pieris margaritacea somereni Talbot, 1928. *Bulletin of the Hill Museum, Witley* **2**: 29 (29).

Type locality: [Kenya]: “Meru”.

Distribution: Kenya (central).

Specific localities: Meru Forest (TL); Ngong (Larsen, 1991c); Matthews Range (Larsen, 1991c).

Belenois margaritacea intermedia Kielland, 1982
Tanzania Mountain Caper White

Belenois margaritacea intermedia Kielland, 1982. *Lambillionea* **81**: 88 (86-90).



Belenois margaritacea intermedia. Male. Left – upperside; right – underside.
Lulanda, Mufindi, Tanzania. May 1988. CC. ABRI-2019-2847.
Images M.C. Williams ex ABRI Collection.



Belenois margaritacea intermedia. Female. Left – upperside; right – underside.
Lulanda, Mufindi, Tanzania. April 1986. CC. ABRI-2019-2848.
Images M.C. Williams ex ABRI Collection.

Type locality: Tanzania: “Ifakara, Mwanihana Forest Reserve”.

Diagnosis: Differs from ssp. *plutonica* on the forewing upperside in that the white area is more extensive, and on the hindwing upperside by the more evenly wide black margin (Kielland, 1990d).

Distribution: Tanzania (east).

Specific localities:

Tanzania – Ifakara, Mwanihana Forest (TL); Uzungwa Range, including Image Mountain (Kielland, 1990d); Nguru Mountains (Kielland, 1990d); Mkomazi Game Reserve (Van Noort & Stone, 2000); Mount Nyumbenitu.

Belenois margaritacea kenyensis (Joicey & Talbot, 1927)
Kenya Mountain Caper White

Pieris margaritacea kenyensis Joicey & Talbot, 1927. *Encyclopedie Entomologique* (B.3 Lepidoptera) **2**: 1-14.



Belenois margaritacea kenyensis. Male. Left – upperside; right – underside.
Mbololo, Kenya. February 1991. SCC. ABRI-2019-2851.
Images M.C. Williams ex ABRI Collection.



Belenois margaritacea kenyensis. Female. Left – upperside; right – underside.
Mbololo, Teita Hills, Kenya. February 2009. Bred. ABRI Leg. ABRI-2019-2852.
Images M.C. Williams ex ABRI Collection.

Type locality: [Kenya]: “Chawia [Gwawia], ca. 5,000 ft., centr. Dabida Hills, forest and native clearings”.

Distribution: Kenya (south-east).

Specific localities:

Kenya – Gwawia, Dabida [= Teita] Hills (TL); Chyulu Hills (Larsen, 1991c); Mt Sagala (Larsen, 1991c).

Belenois margaritacea plutonica (Joicey & Talbot, 1927)
Arusha Mountain Caper White

Pieris margaritacea plutonica Joicey & Talbot, 1927. *Encyclopedie Entomologique* (B.3 Lepidoptera) 2: 1-14.



Belenois margaritacea plutonica. Male. Left – upperside; right – underside.
Mazumbai, West Usambara, Tanzania. January 1993. SCC. ABRI-2019-2853.
Images M.C. Williams ex ABRI Collection.



Belenois margaritacea plutonica. Female. Left – upperside; right – underside.
Kigezi, south-west Uganda. September 1978. SCC. ABRI-2019-2844.
Images M.C. Williams ex ABRI Collection.

Type locality: [Tanzania]: “Tanganyika Territory; the Arusha District, Ngorongoro Crater, 5,800 ft., edge of forest on east side”.

Distribution: Tanzania (north-east - Mt Kilimanjaro, Usambara Mountains, Ngorongoro Crater).

Specific localities:

Tanzania – Ngorongoro Crater (TL); Northern Highlands (Kielland, 1990d); Pare Mountains (Kielland, 1990d); Usambaras (Kielland, 1990d); Ruhebo Mountains (Kielland, 1990d). Refer to discussion of taxonomic difficulties at subspecific level by Kielland (1990: 60).

‘*Belenois ogygia*’ (Trimen, 1883)

Pieris ogygia Trimen, 1883. *Transactions of the Entomological Society of London* **1883**: 356 (347-363).

Pieris ogygia Trimen, 1883. Trimen & Bowker, 1889. [Treated, in error, as a valid species]

Belenois ogygia Trimen. Swanepoel, 1953. [Treated, in error, as a valid species]

Belenois ogygia (Trimen, 1883). Dickson & Kroon, 1978. [Treated, in error, as a valid species]

Probable hybrid of *B. thysa* x *B. zochalia*. Henning *in* Pringle *et al.*, 1994: 294.

Type locality: [South Africa]: “Natal (Coast Districts)”.

Distribution: South Africa, Democratic Republic of Congo.

Early stages: Nothing published.

Larval food: Nothing published.

Relevant literature:

Quickelberge, C. 1982.

Henning, S.F., and Henning, G.A. 1989.

Henning, G.A., *in* Pringle *et al.*, 1994.

‘*Belenois ogygia bongeya*’ Berger, 1981

Belenois ogygia bongeya Berger, 1981. *Les Papillons du Zaïre* 59, 54 (543 pp.). Bruxelles.

Type locality: Democratic Republic of Congo: “Riv. Bongeya affluent de la Talya, région de Mutsora ... en forêt galerie à 1.350 m d’altitude”. Holotype in the Royal Museum for Central Africa, Tervuren, Belgium.

Distribution: Democratic Republic of Congo (Kivu).

****Belenois raffrayi* (Oberthür, 1878)**

Dark Caper White

Pieris raffrayi Oberthür, 1878. *Études d'Entomologie* 3: 17 (1-48).



Belenois raffrayi raffrayi. Male. Left – upperside; right – underside.
Island, Lake Tana, Ethiopia. June 1995. SCC. ABRI-2019-2845.
Images M.C. Williams ex ABRI Collection.



Belenois raffrayi raffrayi. Female. Left – upperside; right – underside.
Island, Lake Tana, Ethiopia. June 1995. SCC. ABRI-2019-2846.
Images M.C. Williams ex ABRI Collection.

Type locality: [Ethiopia]: “Lac de Tzana”.

Diagnosis: Differs from *B. margaritacea* on the hindwing underside in the absence of a marginal yellow spot, and on the hindwing upperside by the darker basal blue (Kielland, 1990d).

Distribution: Ethiopia, Sudan, Uganda, Kenya, Rwanda, Burundi, Democratic Republic of Congo, Tanzania.

Habitat: Montane forest and open grassland (Kielland, 1990d). In Tanzania it is found at altitudes from 1 500 to 2 000 m (Kielland, 1990d).

Habits: The flight is rapid and both sexes are attracted to flowering shrubs and herbaceous plants (Kielland, 1990d). Known to be an avid mudpuddler (Larsen, 1991c).

Early stages: Nothing published.

Larval food:

Capparis species (Capparaceae) [Van Someren, 1974: 317].

Rhus species (Anacardiaceae) [Kielland, 1990d: 61]. – Doubtful (MCW).

***Belenois raffrayi raffrayi* (Oberthür, 1878)**

Dark Caper White

Pieris raffrayi Oberthür, 1878. *Études d'Entomologie* 3: 17 (1-48).



Belenois raffrayi raffrayi. Male. Left – upperside; right – underside.
Island, Lake Tana, Ethiopia. June 1995. SCC. ABRI-2019-2845.
Images M.C. Williams ex ABRI Collection.



Belenois raffrayi raffrayi. Female. Left – upperside; right – underside.
Island, Lake Tana, Ethiopia. June 1995. SCC. ABRI-2019-2846.
Images M.C. Williams ex ABRI Collection.

Type locality: [Ethiopia]: “Lac de Tzana”.

Distribution: Ethiopia (south), Sudan (south).

Specific localities:

Ethiopia – Lake Tzana (TL).

***Belenois raffrayi extendens* (Joicey & Talbot, 1927)
Rwanda Dark Caper White**

Pieris raffrayi extendens Joicey & Talbot, 1927. *Encyclopedie Entomologique* (B.3 Lepidoptera) 2: 1-14.



Belenois raffrayi extendens. Male. Left – upperside; right – underside.
Tumani River. 1 42N, 30 07E, DRC. 22 April 2016. T. Desloges.

Images courtesy Thomas Desloges.



Belenois raffrayi extendens. Female. Left – upperside; right – underside.
Kigezi, south-west Uganda. September 1978. SCC. ABRI-2019-2844.
Images M.C. Williams ex Dobson Collection.

Type locality: [Rwanda]: “Rugege Forest, Ruanda Dist., 8,000 ft”.

Diagnosis: White area of forewing smaller than in ssp. *raffrayi*, more basal blue dusting than in ssp. *similis* (Congdon & Collins, 1998).

Distribution: Uganda, Kenya (west), Rwanda, Burundi, Democratic Republic of Congo (east – Kivu), Tanzania (north-west).

Specific localities:

Kenya – Sotik (Larsen, 1991c); Mara (Larsen, 1991c); Kisii (Larsen, 1991c); Mt Elgon (Larsen, 1991c); Tiriki (Larsen, 1991c).

Rwanda – Rugege Forest (TL).

Democratic Republic of Congo – Kamuhima (Dufrane, 1945); Muana River (Dufrane, 1948); Ituri Forest (Ducarme, 2018); Semuliki Valley (Ducarme, 2018); Mt Mitumba (Ducarme, 2018); Mt Blue (Ducarme, 2018).

Tanzania – Rumanyika Game Reserve, Karagwe District (Congdon & Collins, 1998); Kilimanjaro (De Jong & Congdon, 1993 – erroneous according to Liseki & Vane-Wright, 2014).

intermedia Dufrane, 1945 (as ab. of *Anapheis* [sic] *raffrayi*). *Bulletin et Annales de la Société Royale Entomologique de Belgique* **81**: 91 (90-143). Democratic Republic of Congo: “Kamuhima”.

extrema Dufrane, 1948 (as f. of *Anapheis* [sic] *raffrayi extendens*). *Bulletin et Annales de la Société Royale Entomologique de Belgique* **84**: 161 (160-168). Democratic Republic of Congo: “Rivière Muana”.

Belenois raffrayi similis Kielland, 1978
Mpanda Dark Caper White

Belenois raffrayi similis Kielland, 1978. *Tijdschrift voor Entomologie* **121**: 163 (147-237).



Belenois raffrayi similis. Male. Left – upperside; right – underside.
Island, Lake Tana, Ethiopia. June 1995. SCC. ABRI-2019-2845.
Images M.C. Williams ex ABRI Collection.



Belenois raffrayi similis. Female. Left – upperside; right – underside.
West Kilimanjaro, Tanzania. March 1993. SCC. ABRI-2019-2856.
Images M.C. Williams ex ABRI Collection.

Type locality: Tanzania: “Mpanda, Mt. Sitebi, 2000 m”.

Diagnosis: Characterized on the forewing upperside by the extended white area and on the hindwing upperside by the blue area being extended towards the anal angle (Kielland, 1990d).

Distribution: Tanzania (Mpanda and Kigoma Districts).

Specific localities:

Tanzania – Mount Sitebi (TL); Mount Mahale (Kielland, 1990d); Mweze Highland (Kielland, 1990d); Sitebi-Ipumba-Ntakatta Ranges (Kielland, 1990d).

****Belenois rubrosignata* (Weymer, 1901)**
Red-edged Caper White

Pieris theora var. *rubrosignata* Weymer, 1901. *Entomologische Zeitschrift*. Frankfurt a.M **15**: 65 (61-64, 65-67, 69-70).



Belenois rubrosignata rubrosignata. Male. Left – upperside; right – underside.
Hillwood Farm, Mwinilinga, Zambia. May 1999. CC et al. ABRI-2019-2873.
Images M.C. Williams ex ABRI Collection.



Belenois rubrosignata rubrosignata. Female. Left – upperside; right – underside.
Hillwood Farm, Mwinilunga, Zambia. May 1999. CC et al. ABRI-2019-2875.
Images M.C. Williams ex ABRI Collection.



Belenois rubrosignata rubrosignata. Female. Left – upperside; right – underside.
Mudwiji Plain, Zambia. May 1999. CC et al. ABRI-2019-2874.
Images M.C. Williams ex ABRI Collection.

Type locality: Angola.

Distribution: Angola, Democratic Republic of Congo, Somalia, Uganda, Kenya, Tanzania, Malawi, Zambia.

Habitat: Dense woodland. *Brachystegia* woodland (Kielland, 1990d; Heath *et al.*, 2002). Also on forest margins (Kielland, 1990d). In Tanzania at altitudes from 800 to 1 900 m (Kielland, 1990d).

Early stages: Nothing published.

Larval food:

Ritchiea species (Capparaceae) [Congdon & Bampton, 1996: 18; Kasye Forest, Tanzania; ssp. *kongwana*].

***Belenois rubrosignata rubrosignata* (Weymer, 1901)**
Red-edged Caper White

Pieris theora var. *rubrosignata* Weymer, 1901. *Entomologische Zeitschrift. Frankfurt a.M* 15: 65 (61-64, 65-67, 69-70).



Belenois rubrosignata rubrosignata. Male. Left – upperside; right – underside.
Hillwood Farm, Mwinilinga, Zambia. May 1999. CC et al. ABRI-2019-2873.
Images M.C. Williams ex ABRI Collection.



Belenois rubrosignata rubrosignata. Female. Left – upperside; right – underside.
Hillwood Farm, Mwinilinga, Zambia. May 1999. CC et al. ABRI-2019-2875.
Images M.C. Williams ex ABRI Collection.



Belenois rubrosignata rubrosignata. Female. Left – upperside; right – underside.
Mudwiji Plain, Zambia. May 1999. CC et al. ABRI-2019-2874.
Images M.C. Williams ex ABRI Collection.

Type locality: Angola.

Distribution: Angola, Democratic Republic of Congo (Shaba), Zambia (north).

Specific localities:

Democratic Republic of Congo – Elisabethville (Hulstaert, 1924); Lumbumbashi (Hulstaert, 1924); near Ruwe, about 15 miles west of Lualaba river (Talbot, 1943); Kambove (Talbot, 1943); Ituri Forest (Ducarme, 2018); Central Forest Block (Ducarme, 2018).

Zambia – 150 miles west of Kambove, near the Lufupa river (Neave, 1910); Solwezi (Talbot, 1943); Mwinilinga (Heath *et al.*, 2002); Ikelenge (Heath *et al.*, 2002); Mporokoso (Heath *et al.*, 2002); Kitwe (Heath *et al.*, 2002; females illustrated above); Mufulira (Heath *et al.*, 2002; male illustrated above); Mkushi (Heath *et al.*, 2002); Kawambwa (Heath *et al.*, 2002); Mpika (Heath

et al., 2002).

picta Neave, 1910 (as sp. of *Belenois*). *Proceedings of the Zoological Society of London* **1910**: 63 (2-86). Zambia: “150 miles west of Kambove, near the Lufupa river”.

overlaeti Hulstaert, 1924 (as female f. of *Pieris rubrosignata*). *Revue de Zoologie et de Botanique Africaine* **12**: 98 (90-99). Democratic Republic of Congo: “Elisabethville, riv. Lumbumbashi”. Holotype in the Royal Museum for Central Africa, Tervuren, Belgium.

albinescens Talbot, 1943 (as f. of *Belenois rubrosignata rubrosignata*). *Annals and Magazine of Natural History* (11) **10**: 312 (305-336). Democratic Republic of Congo: “Katanga, near Ruwe, about 15 miles west of Lualaba river, 3000 feet”.

caesia Talbot, 1943 (as dry f. of *Belenois rubrosignata rubrosignata*). *Annals and Magazine of Natural History* (11) **10**: 312 (305-336). Democratic Republic of Congo: “Kambove, 4000-5000 feet”.

aurantia Talbot, 1943 (as female f. of *Belenois rubrosignata rubrosignata*). *Annals and Magazine of Natural History* (11) **10**: 312 (305-336). Zambia: “N.W. Rhodesia, Solwezi”.

***Belenois rubrosignata kongwana* Talbot, 1943**
Kongwa Red-edged Caper White

Belenois rubrosignata kongwana Talbot, 1943. *Annals and Magazine of Natural History* (11) **10**: 313 (305-336).



Belenois rubrosignata kongwana. Male. Left – upperside; right – underside.
Rubondo Island, Tanzania. August 1989. SCC. ABRI-2019-2876.
Images M.C. Williams ex ABRI Collection.



Belenois rubrosignata kongwana. Female. Left – upperside; right – underside.
Rubondo Island, Tanzania. August 1989. SCC. ABRI-2019-2876.
Images M.C. Williams ex ABRI Collection.

Type locality: [Tanzania]: “North-west Tanganyika Territory, district of Kongwa River, Kisokwe

Kiborani Districts”.

Distribution: Uganda (south), Kenya, Tanzania, Malawi.

Specific localities:

Kenya – South Kavirondo (Larsen, 1991c); Mara (Larsen, 1991c); Thompson’s Falls (Larsen, 1991c).

Tanzania – Kongwa River (TL); Ufipa to Kigoma and the Uganda border, in the west (Kielland, 1990d); slopes of Image Mountain (Kielland, 1990d); Rubeho Mountains (Kielland, 1990d); Mufindi (Kielland, 1990d); Kasye Forest (Congdon & Bampton, 1996).

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

Belenois rubrosignata peeli Dixey, 1900
Somalia Red-edged Caper White

Belenois peeli Dixey, 1900. *Proceedings of the Zoological Society of London* **1900**: 15 (10-17).



Belenois rubrosignata peeli. Male. Left – upperside; right – underside.
Nanyuki, Kenya. July 2006. M. Roberts. ABRI-2019-2878.
Images M.C. Williams ex ABRI Collection.



Belenois rubrosignata peeli. Female. Left – upperside; right – underside.
Mogwooni Ranch, Nanyuki, Kenya. SCC, MR. ABRI-2019-2879.
Images M.C. Williams ex ABRI Collection.

Type locality: Somalia: “Sule River, West Somaliland”.

Distribution: Somalia, Kenya.

Specific localities:

Somalia – Sule River (Larsen, 1991c).

Kenya – Nanyuki (specimens illustrated above).

**Belenois solilucis* Butler, 1874
Yellow Caper White



Yellow White (*Belenois solilucis*). Minziro, Tanzania.
Image courtesy Sudheer Kommana.

Belenois solilucis Butler, 1874. *Transactions of the Entomological Society of London* **1874**: 433 (423-436).



Belenois solilucis solilucis. Male. Left – upperside; right – underside.
Tumani River. 1 42N, 30 07E, DRC. 23 January 2016. T. Desloges.
Images courtesy Thomas Desloges.



Belenois solilucis loveni. Female. Left – upperside; right – underside.
Lubowa, Uganda. 0 13N, 32 33E. 21 August 2014. T. Desloges.
Images courtesy Thomas Desloges.



Belenois solilucis loveni. Female. Left – upperside; right – underside.
Pateka, North Kivu, Democratic Republic of Congo. November 2011. ABRI Leg. ABRI-2019-2897.
Images M. Williams ex ABRI Collection.



Belenois solilucis loveni. Female. Left – upperside; right – underside.
Mapimbi, Kivu, Democratic Republic of Congo. September 2016. ABRI Leg. ABRI-2019-2898.
Images M. Williams ex ABRI Collection.

Alternative common name: Yellow Caper White.

Type locality: Angola.

Distribution: Nigeria, Cameroon, Gabon, Angola, Central African Republic, Democratic Republic of Congo, Sudan, Ethiopia, Uganda, Kenya, Tanzania.

Habitat: Lowland to sub-montane forest. In Tanzania at altitudes from 780 to 1 600 m (Kielland, 1990d).

Habits: A rare forest butterfly (Larsen, 2005a). The flight, for a species of *Belenois*, is not particularly fast but is much faster than its model *Mylothris flaviana* (Larsen, 2005a). Males are avid mudpuddlers (Kielland, 1990d).

Early stages: Nothing published.

Larval food:

Capparis tomentosa Lam. (Capparaceae) [Van Someren, 1974: 317].

Maerua species (Capparaceae) [Larsen, 2005a].

Ritchiea species (Capparaceae) [Larsen, 2005a].

Belenois solilucis solilucis Butler, 1874
Yellow Caper White

Belenois solilucis Butler, 1874. *Transactions of the Entomological Society of London* **1874**: 433 (423-436).



Belenois solilucis solilucis. Male. Left – upperside; right – underside.
Tumani River. 1 42N, 30 07E, DRC. 23 January 2016. T. Desloges.
Images courtesy Thomas Desloges.

Type locality: Angola.

Distribution: Nigeria (south-east), Cameroon, Gabon, Angola (north), Central African Republic, Democratic Republic of Congo.

Specific localities:

Nigeria – Cross River Loop (Larsen, 2005a); Gashaka-Gumpti (Knoop, 1995).

Cameroon – Molundu (Schultze, 1914); Dalugene (Schultze, 1914); Korup (Larsen, 2005a).

Gabon – Kangwe (Vande weghe, 2010).

Angola – Lopollo (Rogenhofer, 1890); Golungo (Rogenhofer, 1890); N’Dallo Tando (Talbot, 1943).

Democratic Republic of Congo – Between Leopoldville and Stanley Falls (Rogenhofer, 1890); Mukenge (Suffert, 1904); Lake Kiwu and Ituri District (Aurivillius, 1925).

sulphurescens Capronnier, 1889 (as sp. of *Pseudopontia*). *Bulletin de la Société Entomologique de Belgique* **1889**: 120 (118-127). Democratic Republic of Congo: “Congo”.

caere Rogenhofer, 1890 (as sp. of *Mylothris*). *Annalen des (K.K.) Naturhistorischen Museums. Wien.* **4**: 550 (547-554). Angola: “bei Lopollo aus der Hochebene von Huilta im Innern des Districtes von Mossamedes in Banguela”.

agylla Rogenhofer, 1890 (as sp. of *Mylothris*). *Annalen des (K.K.) Naturhistorischen Museums. Wien.* **4**: 549 (547-554). Democratic Republic of Congo: “zwischen Leopoldville und Stanley-Fall”; Angola: “von Golungo alto in Angola”.

narcissus Butler, 1898 (as sp. of *Phrissura*). *Transactions of the Entomological Society of London* **1898**: 431 (431-438). Angola.

glucki Suffert, 1904 (as sp. of *Pieris*). *Deutsche Entomologische Zeitschrift, Iris* **17**: 77 (12-107). Democratic Republic of Congo: “Mukenge”.

abti Suffert, 1904 (as sp. of *Pieris*). *Deutsche Entomologische Zeitschrift, Iris* **17**: 77 (12-107). Democratic Republic of Congo: “Central Africa, 6° s. 22-23° ö”.

subornata Schultze, 1914 (as var. of *Pieris solilucis*). *Entomologische Rundschau* **31**: 70 (70). Cameroon: “Molundu und Dalugene, Urwaldgebiet, Südost-Kameruns”.

ochracea Aurivillius, 1925 (as female ab. of *Pieris theuszi*). *Archiv für Zoologi* **17** (A) (32): 9 (20 pp.). Democratic Republic of Congo: “Kiwu See und Ituri Gebiet”.

albida Aurivillius, 1925 (as female ab. of *Pieris theuszi*). *Archiv für Zoologi* **17** (A) (32): 9 (20 pp.). Democratic Republic of Congo: “Kiwu See und Ituri Gebiet”.

citronata Talbot, 1943 (as female f. of *Belenois solilucis*). *Annals and Magazine of Natural History* (11) **10**: 324 (305-336). Angola: “Northern Angola, N’Dallo Tando, 2700 feet”.

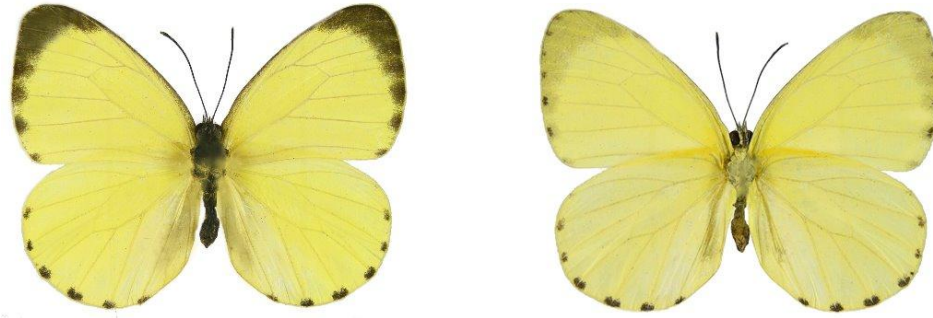
incitronata Talbot, 1943 (as female f. of *Belenois solilucis*). *Annals and Magazine of Natural History*

(11) 10: 324 (305-336). Angola: “Northern Angola, N’Dallo Tando, 2700 feet”.

oesypera Talbot, 1943 (as female f. of *Belenois solilucis*). *Annals and Magazine of Natural History* (11) 10: 324 (305-336). Angola: “Northern Angola, N’Dallo Tando, 2700 feet”.

Belenois solilucis loveni (Aurivillius, 1921)
Eastern Yellow Caper White

Pieris solilucis var. *loveni* Aurivillius, 1921. *Arkiv för Zoologi* 14 (5): 15 (27 pp.).



Belenois solilucis loveni. Female. Left – upperside; right – underside.
Lubowa, Uganda. 0 13N, 32 33E. 21 August 2014. T. Desloges.
Images courtesy Thomas Desloges.



Belenois solilucis loveni. Female. Left – upperside; right – underside.
Pateka, North Kivu, Democratic Republic of Congo. November 2011. ABRI Leg. ABRI-2019-2897.
Images M. Williams ex ABRI Collection.



Belenois solilucis loveni. Female. Left – upperside; right – underside.
Mapimbi, Kivu, Democratic Republic of Congo. September 2016. ABRI Leg. ABRI-2019-2898.
Images M. Williams ex ABRI Collection.

Type locality: “Brit. O. Afrika”.

Distribution: Democratic Republic of Congo (north-east), Sudan (south), Ethiopia (south-west), Uganda, Kenya (west), Tanzania (west).

Specific localities:

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

Ethiopia – Didessa (Ungemach, 1932); Oumbi (Ungemach, 1932).

Uganda – Cartouche Village, near Lesse, W. bank of Semliki (Joicey & Talbot, 1921); Jinja (Talbot, 1943); Busia (Stoneham, 1957); Nabagabo (Stoneham, 1957); Kampala (Stoneham, 1957); Bwamba Forest (Stoneham, 1957); Semuliki N.P. (Davenport & Howard, 1996).

Kenya – South Kavirondo (Larsen, 1991c); Ugenyia (Larsen, 1991c); Nyanza (Larsen, 1991c); Kakamega (Larsen, 1991c).

Tanzania – Kitungulu (Strand, 1911); Mpanda (Kielland, 1990d); Kigoma (Kielland, 1990d); Biharamulo (Kielland, 1990d); Geita (Kielland, 1990d).

frommi Strand, 1911 (as sp. of *Pieris*). *Mitteilungen aus dem Zoologischen Museum in Berlin* **5**: 292 (275-304). Tanzania: “Kitungulu”.

sabulosa Joicey & Talbot, 1921 (as female f. of *Pieris solilucis*). *Bulletin of the Hill Museum, Witley* **1**: 45 (40-166). Uganda: “Cartouche Village, near Lesse, W. bank of Semliki”.

appioides Ungemach, 1932 (as female f. of *Pieris solilucis*). *Mémoires de la Société des Sciences Naturelles (et Physiques) du Maroc* **32**: 34 (1-122). Ethiopia: “Didessa”.

hemichrysa Ungemach, 1932 (as female f. of *Pieris solilucis*). *Mémoires de la Société des Sciences Naturelles (et Physiques) du Maroc* **32**: 35 (1-122). Ethiopia: “Oumbi”.

marginepuncta Talbot, 1943 (as female f. of *Belenois solilucis*). *Entomologist* **76**: 167 (165-167). Uganda: “Jinja”.

telephassa Stoneham, 1957 (as female f. of *Belenois solilucis*). *Bulletin of the Stoneham Museum* (69): [2] ([4 pp.]). Uganda: “Busia”.

coronis Stoneham, 1957 (as female f. of *Belenois solilucis*). *Bulletin of the Stoneham Museum* (69): [2] ([4 pp.]). Uganda: “Nabagabo”.

daphne Stoneham, 1957 (as female f. of *Belenois solilucis*). *Bulletin of the Stoneham Museum* (69): [2] ([4 pp.]). Uganda: “Kampala”.

procis Stoneham, 1957 (as female f. of *Belenois solilucis*). *Bulletin of the Stoneham Museum* (69): [2] ([4 pp.]). Uganda: “Bwamba Forest, Ruwenzori”.

eurydice Stoneham, 1957 (as female f. of *Belenois solilucis*). *Bulletin of the Stoneham Museum* (69): [2] ([4 pp.]). Uganda: “Bwamba Forest, Ruwenzori”.

****Belenois subeida* (Felder & Felder, [1865])**

Northern Caper White

Pieris subeida Felder & Felder, [1865] *in* Felder & Felder, [1865-7]. *Reise der Österreichischen Fregatte Novara* 174 (549 pp.). Wien.



Belenois subeida subeida. Male. Left – upperside; right – underside.
Tumani River. 1 42N, 30 07E, DRC. 22 April 2016. T. Desloges.
Images courtesy Thomas Desloges.



Belenois subeida subeida. Female. Left – upperside; right – underside.
Nangol Ibwel, Uganda. September 2012. JP Lequeux. ABRI-2019-2902.
Images M. Williams ex ABRI Collection.



Belenois subeida subeida. Female. Left – upperside; right – underside.
Karama, Rwanda. July 1980. SCC. ABRI-2019-2904.
Images M. Williams ex ABRI Collection.



Belenois subeida ssp. Female. Left – upperside; right – underside.
Katatoi. October 2004. SCC. ABRI-2019-2907.
Images M. Williams ex ABRI Collection.

Alternative common name: Northern Caper White.

Type locality: [Sudan]: “Africa Centralis, Bahr el Ghazal”.

Distribution: Guinea, Burkina Faso, Ivory Coast, Ghana, Benin, Nigeria, Cameroon, Sudan, Democratic Republic of Congo, Central African Republic, Ethiopia, Uganda, Kenya, Tanzania.

Habitat: Forest and dense woodland. In West Africa it inhabits Sudan savanna (Larsen, 2005a). In Tanzania at altitudes of 1 000 to 1 800 m (Kielland, 1990d).

Habits: In West Africa it is local but may be common where found (Larsen, 2005a). Known to visit flowers and to mudpuddle (Larsen, 2005a).

Early stages: Nothing published.

Larval food:

Capparis species (Capparaceae) [Van Someren, 1974: 317].

Maerua species (Capparaceae) [Larsen, 1991c: 140].

Ritchiea species (Cappariaceae) [Larsen, 1991c: 140].

Belenois subeida subeida (Felder & Felder, [1865])

Northern Caper White

Pieris subeida Felder & Felder, [1865] *in* Felder & Felder, [1865-7]. *Reise der Österreichischen Fregatte Novara* 174 (549 pp.). Wien.



Belenois subeida subeida. Male. Left – upperside; right – underside.
Tumani River. 1 42N, 30 07E, DRC. 22 April 2016. T. Desloges.
Images courtesy Thomas Desloges.



Belenois subeida subeida. Female. Left – upperside; right – underside.
Nangol Ibwel, Uganda. September 2012. JP Lequeux. ABRI-2019-2902.
Images M. Williams ex ABRI Collection.



Belenois subeida subeida. Female. Left – upperside; right – underside.
Karama, Rwanda. July 1980. SCC. ABRI-2019-2904.
Images M. Williams ex ABRI Collection.



Belenois subeida ssp. Female. Left – upperside; right – underside.
Katatoi. October 2004. SCC. ABRI-2019-2907.
Images M. Williams ex ABRI Collection.

Type locality: [Sudan]: “Africa Centralis, Bahr el Ghazal”.

Distribution: Sudan, Democratic Republic of Congo (north and east), Central African Republic, ?Uganda (north).

Specific localities:

Sudan – Bahr el Ghazal (TL); Foda (Butler, 1888).

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

instabilis Butler, 1888 (as sp. of *Belenois*). *Proceedings of the Zoological Society of London* **1888**: 76 (56-85). Sudan: “Fôda”.

demarginata Talbot, 1943 (as f. of *Belenois subeida subeida*). *Annals and Magazine of Natural History* (11) **10**: 315 (305-336). Sudan: “Bahr-el-Ghazal”.

***Belenois subeida frobeniusi* (Strand, 1909)**
Ghana Northern Caper White

Pieris frobeniusi Strand, 1909. *Archiv für Naturgeschichte* **75** (1.3.): 306 (303-311).



Belenois subeida frobeniusi. Female. Left – upperside; right – underside.
Nakpanduri, northern Ghana. October 2013. RV. ABRI-2019-2905.
Images M. Williams ex ABRI Collection.

Type locality: Guinea: “Sigirri”.

Distribution: Guinea, Burkina Faso, Ivory Coast (north), Ghana, Benin (central, north), Nigeria, Cameroon (north).

Specific localities:

Guinea – Sigirri (TL).

Burkina Faso – Poundou (Talbot, 1943).

Ghana – Lawra (Seth-Smith, 1938); Mole National Park (Larsen, 2005a).

Benin – see Coache *et al.*, 2017.

Nigeria – Nsukka (Larsen, 2005a); Mambilla Plateau (Larsen, 2005a).

Cameroon – Gore (Gaede, 1915).

zoraida Gaede, 1915 (as sp. of *Pieris*). *Internationale Entomologische Zeitschrift* **9**: 71 (38-40, 71-74).
Cameroon: “Gore, Neu-Kamerun”.

voltaensis Talbot, 1943 (as ssp. of *Belenois subeida*). *Annals and Magazine of Natural History* (11) **10**: 315 (305-336). Burkina Faso: “Haute Volta, Poundou”.

***Belenois subeida hailo* (Ungemach, 1932)**
Ethiopia Northern Caper White

Pieris calypto hailo Ungemach, 1932. *Mémoires de la Société des Sciences Naturelles (et Physiques) du Maroc* **32**: 34 (1-122).

Type locality: [Ethiopia]: “Nolé Kaba”.

Distribution: Ethiopia.

Specific localities:

Ethiopia – Nole Kaba (TL); Baro (Ungemach, 1932); Tirka, Gemira District (Talbot, 1943).

ochracea Ungemach, 1932 (as female f. of *Pieris calypto*). *Mémoires de la Société des Sciences*

Naturelles (et Physiques) du Maroc **32**: 33 (1-122). Ethiopia: “Baro”.

hiemalis Ungemach, 1932 (as f. of *Pieris calypso*). *Mémoires de la Société des Sciences Naturelles (et Physiques) du Maroc* **32**: 34 (1-122). Ethiopia: “Abyssinie, Nolé Kaba”.

hiemalis Talbot, 1943 (as ssp. of *Belenois subeida*). *Annals and Magazine of Natural History* (11) **10**: 316 (305-336). Ethiopia: “Abyssinie, Nolé Kaba”.

auristriga Talbot, 1943 (as female f. of *Belenois subeida hiemalis*). *Annals and Magazine of Natural History* (11) **10**: 316 (305-336). Ethiopia: “S.W. Abyssinia, Gemira district, Tirka, 4200 feet”.

***Belenois subeida sylvander* Grose-Smith, 1890**
Uganda Northern Caper White

Belenois sylvander Grose-Smith, 1890. *Proceedings of the Zoological Society of London* **1890**: 464 (463-473).



Belenois subeida sylvander. Female. Left – upperside; right – underside.
Rangwe Mountain, near Sindo, western Kenya. September 2003. ABRI Coll. ABRI-2019-2903.
Images M. Williams ex ABRI Collection.



Belenois subeida sylvander. Female. Left – upperside; right – underside.
Lolgorien, Kenya. April 2004. ABRI Team. ABRI-2019-2906.
Images M. Williams ex ABRI Collection.

Type locality: No locality given.

Distribution: Uganda, Kenya (west), Tanzania.

Specific localities:

Kenya – Kitale (Stoneham, 1957); Kakamega (Larsen, 1991c); South Kavirondo (Larsen, 1991c); Kisumu (Larsen, 1991c); Masai Mara (Larsen, 1991c).

Tanzania – Geita (Stoneham, 1957); Ufipa to Mpanda (Kielland, 1990d); Kigoma (Kielland, 1990d); Biharamulo (Kielland, 1990d); Ngara (Kielland, 1990d).

arens Talbot, 1943 (as f. of *Belenois instabilis*). *Annals and Magazine of Natural History* (11) **10**: 316 (305-336). Tanzania: “Tanganyika Territory, 30.20'E. 3.20'S.”.

circe Stoneham, 1957 (as female f. of *Belenois subeida*). *Bulletin of the Stoneham Museum* (68): [4] ([4 pp.]). Kenya: “Kitale”.

ignescens Stoneham, 1957 (as female f. of *Belenois subeida*). *Bulletin of the Stoneham Museum* (68): [4] ([4 pp.]). Tanzania: “Geita, Tanganyika Territory”.

galatea Stoneham, 1957 (as female f. of *Belenois subeida*). *Bulletin of the Stoneham Museum* (68): [4] ([4 pp.]). No locality given.

achaeus Stoneham, 1957 (as male f. of *Belenois subeida*). *Bulletin of the Stoneham Museum* (68): [4] ([4 pp.]). No locality given.

****Belenois sudanensis* (Talbot, 1929)** **Sudan Caper White**

Pieris calypso sudanensis Talbot, 1929. *Bulletin of the Hill Museum, Witley* **3**: 139 (139-142).



Belenois sudanensis sudanensis. Male. Left – upperside; right – underside.
Imatong Mountains, Sudan. March 1981. SCC. ABRI-2019-2885.
Images M. Williams ex ABRI Collection.



Belenois sudanensis katalensis. Female. Left – upperside; right – underside.
Malepe, Beni, DRC. 0 29N, 29 28E. 7 October 2015. T. Desloges.
Images courtesy Thomas Desloges.

Alternative common name: Sudan Caper White.

Type locality: Sudan: “Bahr-el-Ghazal, Aburi”.

Diagnosis: Male differs from that of *B. calypso* in the following respects: upperside forewing with smaller white spots in the black apical patch and black spot at end of cell rounded and larger; hindwing underside with black marginal spots not united by a black marginal line (Kielland, 1990d).

Distribution: Cameroon, Gabon, Angola (Mendes *et al.*, 2018), Congo, Central African Republic, Democratic Republic of Congo, Sudan, Uganda, Kenya, Tanzania.

Habitat: Lowland evergreen forest. In Tanzania at altitudes from 800 to 1 000 m (Kielland, 1990d).

Habits: The flight is fast and high. Males mudpuddle (Larsen, 1991c).

Early stages:

Larsen, 1991c: 141.

“According to Fontaine the larvae are quite distinct from those of *Belenois calypso*.”

Larval food:

Clerodendrum species (Verbenaciae) [Larsen, 1991c: 141].

Belenois sudanensis sudanensis (Talbot, 1929)

Sudan Caper White

Pieris calypso sudanensis Talbot, 1929. *Bulletin of the Hill Museum, Witley* 3: 139 (139-142).



Belenois sudanensis sudanensis. Male. Left – upperside; right – underside.
Imatong Mountains, Sudan. March 1981. SCC. ABRI-2019-2885.
Images M. Williams courtesy ABRI Collection.

Type locality: Sudan: “Bahr-el-Ghazal, Aburi”.

Distribution: Sudan (south), Kenya (west).

Specific localities:

Sudan – Bahr el Ghazal (TL).

Kenya – Kakamega (Larsen, 1991c).

Belenois sudanensis katalensis Berger, 1981

Goma Sudan Caper White

Belenois sudanensis katalensis Berger, 1981. *Les Papillons du Zaire* 61 (543 pp.). Bruxelles.



Belenois sudanensis katalensis. Male (Wingspan 58 mm). Left – upperside; right – underside.
Mabira Forest, Uganda. 1 December 2007. P. Ward.
Images M.C. Williams ex Dobson Collection.



Belenois sudanensis katalensis. Female. Left – upperside; right – underside.
Malepe, Beni, DRC. 0 29N, 29 28E. 7 October 2015. T. Desloges.
Images courtesy Thomas Desloges.

Type locality: Democratic Republic of Congo: “Kivu-Nord, entre Goma et Rutshuru”. Holotype and allotype in the Royal Museum for Central Africa, Tervuren, Belgium.

Distribution: Democratic Republic of Congo (north Kivu), Uganda (east and central).

Specific localities:

Democratic Republic of Congo – Goma (TL); Rutshuru (Berger, 1981); Ituri Forest (Ducarme, 2018); Semuliki Valley (Ducarme, 2018); Mt Mitumba (Ducarme, 2018).

Belenois sudanensis mayumbana Berger, 1981

Mayumbe Sudan Caper White

Belenois sudanensis mayumbana Berger, 1981. *Les Papillons du Zaire* 61 (543 pp.). Bruxelles.

Type locality: Democratic Republic of Congo: “Mayumbe, Luali”. Holotype and allotype in the Royal Museum for Central Africa, Tervuren, Belgium.

Distribution: Democratic Republic of Congo (Mayumbe), Angola.

Specific localities:

Democratic Republic of Congo – Mayumbe (TL).

Belenois sudanensis pseudodentigera Berger, 1981

Shaba Sudan Caper White

Belenois sudanensis pseudodentigera Berger, 1981. *Les Papillons du Zaire* 61 (543 pp.). Bruxelles.



Belenois sudanensis pseudodentigera. Male. Left – upperside; right – underside.
Tumani River. 1 42N, 30 07E, DRC. 19 March 2016. T. Desloges.
Images courtesy Thomas Desloges.

Type locality: Democratic Republic of Congo: “Shaba, Kapanga”. Holotype and allotype in the Royal Museum for Central Africa, Tervuren, Belgium.

Distribution: Cameroon, Gabon, Angola, Congo, Central African Republic, Democratic Republic of Congo, Tanzania.

Specific localities:

Gabon – Bitam (Vande weghe, 2010); Kangwe (Vande weghe, 2010); Bakouaka (Vande weghe, 2010); Franceville (Vande weghe, 2010).

Democratic Republic of Congo – Kapanga (TL).

Tanzania – Sandstone area of Kigoma District (Kemfu Forest; Kasye Forest; Mihumu; Mukuyu) (Kielland, 1990d); Katavi National Park (Fitzherbert *et al.*, 2006).

bicolor Berger, 1981 (as f. of *Belenois sudanensis pseudodentigera*). *Les Papillons du Zaire* 61 (543 pp.). Bruxelles. Democratic Republic of Congo: “Shaba, Kapanga”. Holotype in the Royal Museum for Central Africa, Tervuren, Belgium.

unicolor Berger, 1981 (as f. of *Belenois sudanensis pseudodentigera*). *Les Papillons du Zaire* 61 (543 pp.). Bruxelles. Democratic Republic of Congo: “Shaba, Kapanga”. Holotype in the Royal Museum for Central Africa, Tervuren, Belgium.

****Belenois theora* (Doubleday, 1846)**
Western Caper White

Pieris theora Doubleday, 1846. *Annals and Magazine of Natural History* (1) 17: 25 (22-26).



Belenois theora theora. Male. Left – upperside; right- underside.
Ivindo N.P., Gabon. 19 November 2017. J. Dobson.
Images M.C. Williams ex Dobson Collection.



Belenois theora theora. Female. Left – upperside; right- underside.
 Ipassa, Gabon. 19 June 2016. J. Dobson.
 Images M.C. Williams ex Dobson Collection.



Belenois theora theora. Female. Left – upperside; right – underside.
 Suhin, Ghana. January 2009. RV. ABRI-2019-2880.
 Images M.C. Williams ex ABRI Collection.



Belenois theora theora. Female. Left – upperside; right – underside.
 Bibiani, western Ghana. April 2007. SY. ABRI-2019-2881.
 Images M.C. Williams ex ABRI Collection.

Alternative common name: Forest Caper White.

Type locality: Ghana: “Ashanti”.

Diagnosis: Similar to *B. rubrosignata* but males with wing margins more heavily black and hindwing underside without reddish costa and orange markings (Kielland, 1990d).

Distribution: Guinea-Bissau (Bivar-de-Sousa *et al.*, 2007), Guinea, Liberia, Ivory Coast, Ghana, Togo, Benin, Nigeria, Cameroon, Gabon, Central African Republic, Democratic Republic of Congo, Uganda, Sudan, Tanzania.

Recorded, in error, from Angola by Aurivillius (1898).

Habitat: Woodland and forest margins (Kielland, 1990d). In Tanzania at altitudes from 900 to 1 500 m (Kielland, 1990d). In West Africa it is a forest species (Larsen, 2005a).

Habits: Males are known to mud-puddle (Larsen, 2005a). A unidirectional mass flight by males in Okomu Nature Sanctuary in Nigeria is described by Larsen (2005a); he noted a similar phenomenon in Ghana, which, in addition, also involved males of *Appias sylvia* (Larsen, 2005a: 102).

Early stages: Nothing published.

Larval food:

A non-capparaceous plant [Fontaine, 1986].

Capparis species (Capparaceae) [Kielland, 1990d: 62].

Belenois theora theora (Doubleday, 1846)
Western Caper White

Pieris theora Doubleday, 1846. *Annals and Magazine of Natural History* (1) 17: 25 (22-26).



Belenois theora theora. Male. Left – upperside; right- underside.
Ivindo N.P., Gabon. 19 November 2017. J. Dobson.
Images M.C. Williams ex Dobson Collection.



Belenois theora theora. Female. Left – upperside; right- underside.
Ipassa, Gabon. 19 June 2016. J. Dobson.
Images M.C. Williams ex Dobson Collection.



Belenois theora theora. Female. Left – upperside; right – underside.
Suhin, Ghana. January 2009. RV. ABRI-2019-2880.
Images M.C. Williams ex ABRI Collection.



Belenois theora theora. Female. Left – upperside; right – underside.
Bibiani, western Ghana. April 2007. SY. ABRI-2019-2881.
Images M.C. Williams ex ABRI Collection.

Type locality: Ghana: “Ashanti”.

Distribution: Guinea-Bissau (Bivar-de-Sousa *et al.*, 2007), Guinea, Liberia, Ivory Coast, Ghana, Togo, Benin (south), Nigeria, Cameroon, Gabon.

Specific localities:

Guinea – Nimba Mountains (Larsen, 2005a).

Ghana – Ashanti (TL); Cape Coast Castle (Hewitson, 1869); Bobiri Butterfly Sanctuary (Larsen *et al.*, 2007).

Togo – Klouto [6°57'15.07"N 0°34'54.40"E] (Safian *et al.*, 2009).

Benin – see Coache *et al.*, 2017.

Nigeria – Okomu Nature Sactuary (Larsen, 2005a).

Cameroon – Korup (Larsen, 2005a).

Gabon – Kinguele (Vande weghe, 2010); Tchimbele (Vande weghe, 2010); Waka (Vande weghe, 2010).

paroreia Hewitson, 1869 (as sp. of *Pieris*). *Transactions of the Entomological Society of London* **1869**: 72 (71-75). Ghana: “Cape Coast Castle”.

sylvarum Mabilie, 1890 (as sp. of *Pieris*). *Annales de la Société Entomologique de France* (6) **10**: 27 (17-51). No locality given.

brevimacula Talbot, 1943 (as f. of *Belenois theora theora*). *Annals and Magazine of Natural History* (11) **10**: 319 (305-336). Democratic Republic of Congo?: “Bukossi”.

Belenois theora laeta (Weymer, 1903)
Small Western Caper White

Pieris theora var. *laeta* Weymer, 1903. *Deutsche Entomologische Zeitschrift, Iris* **16**: 229 (221-235).



Belenois theora laeta. Male. Left – upperside; right – underside.
Mbau Territory, N. Kivu, DRC. 28 March 2017. R. Ducarme.
Images courtesy Thomas Desloges.

Type locality: “Deutsch-Ost-Afrika”.

Diagnosis: Smaller than the nominate subspecies and ssp. *concolor*; with or without orange on hindwing upperside; reduced black marginal spots on hindwing underside (Congdon & Collins, 1998).

Distribution: Democratic Republic of Congo (Kivu), Sudan (south), Uganda (west), Tanzania (north-west).

Specific localities:

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 – Sesse Islands (Suffert, 1904); Bunyoro (Talbot, 1943); Budongo Forest (Talbot, 1943); Kakindu Hill (Talbot, 1943); Semuliki N.P. (S. Forbes, pers. comm., 2017).

Tanzania – Mpanda (Kielland, 1990d); Kigoma (Kielland, 1990d); Minziro forest block (uncommon) (Congdon & Collins, 1998).

lortzingi Suffert, 1904 (as sp. of *Pieris*). *Deutsche Entomologische Zeitschrift, Iris* **17**: 79 (12-107). Uganda: “Insel Sesse, Deutsch-Ost-Afrika”.

lacteola Talbot, 1943 (as f. of *Belenois theora lortzingi*). *Annals and Magazine of Natural History* (11) **10**: 320 (305-336). Uganda: “Bunyoro, Budongo Forest”.

parvimacula Talbot, 1943 (as ssp. of *Belenois theora*). *Annals and Magazine of Natural History* (11) **10**: 320 (305-336). Uganda: “near Kakindu Hill, 1.10'S., 31.30'E., thick forest”.

Belenois theora ratheo (Suffert, 1904)

Cameroon Western Caper White

Pieris theora ratheo Suffert, 1904. *Deutsche Entomologische Zeitschrift, Iris* **17**: 81 (12-107).

Type locality: Cameroon: “Barombi Station, Camerun”.

Distribution: Cameroon, to Central African Republic, Democratic Republic of Congo (central and south).

Specific localities:

Cameroon – Barombi Station (TL).

Central African Republic – Dzanga (Noss, 1998).

Democratic Republic of Congo – Bena-Bendi (Aurivillius, 1899); Bangala (Aurivillius, 1899); Beni (Hulstaert, 1924); Zinga (Rebel, 1930).

concolor Aurivillius, 1899 *in* Aurivillius, 1898-9 (as ab. of *Pieris theora*). *Kungliga Svenska Vetenskapakademiens Handlingar* **31** (5): 410 (1-561). Democratic Republic of Congo: “Congogebiet, Bena-Bendi”.

maculata Aurivillius, 1899 *in* Aurivillius, 1898-9 (as var. or ab. of *Pieris theora*). *Kungliga Svenska Vetenskapakademiens Handlingar* **31** (5): 410 (1-561). Democratic Republic of Congo: “Congogebiet, Bangala”.

obscurata Hulstaert, 1924 (as female ab. of *Pieris theora*). *Revue de Zoologie et de Botanique Africaine* **12**: 97 (90-99). Democratic Republic of Congo: “Beni”. Holotype in the Royal Museum for Central Africa, Tervuren, Belgium.

weidholzi Rebel, 1930 (as ssp. of *Pieris theora*). *Verhandlungen der Zoologisch-Botanischen Gesellschaft in Wien* **79**: 99 (98-103). Democratic Republic of Congo: “Zinga”.

sulfurata Talbot, 1943 (as female f. of *Belenois theora concolor*). *Annals and Magazine of Natural History* (11) **10**: 320 (305-336). Cameroon: “Cameroons”.

****Belenois theuszi* (Dewitz, 1889)**
Central Forest Caper White

Pieris theuszi Dewitz, 1889. *Entomologische Nachrichten. Berlin* **15**: 107 (101-110).



Belenois theuszi. Male. Left – upperside; right- underside.
Ivindo N.P., Gabon. 25 November 2017. J. Dobson.
Images M.C. Williams ex Dobson Collection.



Belenois theuszi. Female. Left – upperside; right – underside.
Makele, Kivu, Democratic Republic of Congo. November 2011. ABRI Leg. ABRI-2019-2890.
Images M. Williams ex ABRI Collection.



Belenois theuszi. Female. Left – upperside; right – underside.
Mount Kamelon, Sangmelima, Cameroon. February 1993. SCC. ABRI-2019-2892.
Images M. Williams ex ABRI Collection.



Belenois theuszi. Female. Left – upperside; right – underside.
Botambi, Central African Republic. June 2000. SCC. ABRI-2019-2891.
Images M. Williams ex ABRI Collection.



Belenois theuszi. Female. Left – upperside; right – underside.
Mbaiki, Lobaye, Central African Republic. January 1995. SCC. ABRI-2019-2893.
Images M. Williams ex ABRI Collection.

Alternative common name: Central Caper White.

Type locality: [Angola]: “Quango”.

Distribution: Nigeria (east), Cameroon, Equatorial Guinea, Gabon, Congo, Central African Republic, Angola (north), Democratic Republic of Congo, Uganda (west).

Recorded, in error, from Guinea by Berger (1981) and from Ghana by Ackery *et al.* (1995) (Larsen, 2005a).

Specific localities:

Nigeria – Cross River Loop (Boorman & Roche, 1973); Oban Hills (Larsen, 2005a); Okwangwo (Larsen, 2005a).

Cameroon – Bonge (Aurivillius, 1895); Makomo (Strand, 1913); near the southern bank of the river Nyong just south of Makak station (Birket-Smith, 1960); Korup (Larsen, 2005a).

Equatorial Guinea – Alen (Strand, 1913).

Gabon – Alen Nkoma (Vande weghe, 2010); Waka (Vande weghe, 2010); Ovan (Vande weghe, 2010); Ipassa (Vande weghe, 2010); Bakouaka (Vande weghe, 2010); Franceville (Vande weghe, 2010); Ekouyi (Vande weghe, 2010); 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).

Habitat: Primary, dense forest (Larsen, 2005a).

Habits: Males mud-puddle (Larsen, 2005a). The female appears to mimic *Mylothris rhodope* but searches for larval hosts low down in comparison to its model, which flies high up (Larsen, 2005a).

Early stages: Nothing published.

Larval food:

Ritchiea species (Capparaceae) [Larsen, 2005a].

semialba Aurivillius, 1895 (as female var. of *Pieris theuszi*). *Entomologisk Tidskrift* **16**: 261 (195-220, 255-268). Cameroon: “Bonge, Camerunfluss”. Holotype in the Swedish Natural History Museum (images available at www2.nrm.se/en/lep_nrm/t).

semimaculata Strand, 1913 (as ab. of *Pieris theuszi*). *Archiv für Naturgeschichte* **79** (A.2.): 17 (10-26). Cameroon: “Makomo”.

hypermaculata Strand, 1913 (as var. of *Pieris theuszi*). *Archiv für Naturgeschichte* **79** (A.2.): 17 (10-26). Cameroon: “Makomo”.

perimagia Strand, 1913 (as ab. of *Pieris theuszi*). *Archiv für Naturgeschichte* **79** (A.2.): 18 (10-26). Equatorial Guinea: “Alén”.

reducta Birket-Smith, 1960 (as ab? of *Pieris theuszi*). *Bulletin de l'Institut Français d'Afrique Noire* (A) **22**: 544 (521-554, 924-983, 1259-1284). Cameroon: “near the southern bank of the river Nyong just south of Makak station, French Cameroons”.

**Belenois thysa* (Hopffer, 1855)#

False Dotted Border

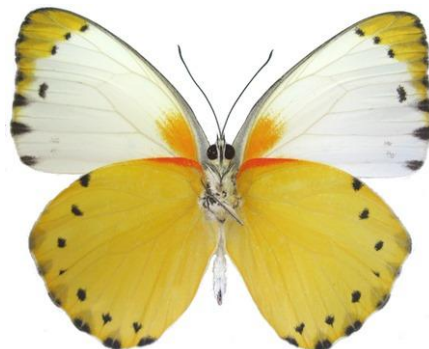
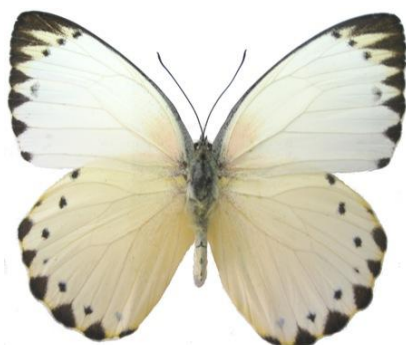
Pieris thysa Hopffer, 1855. *Berichte über die zur Bekanntmachung geeigneten Verhandlungen der Königl. Preuss. Akademie der Wissenschaften zu Berlin* **1855**: 639 (639-643).

Pieris thysa Hopffer, 1855. Trimen & Bowker, 1889.

Belenois thysa Hopffer. Swanepoel, 1953a.

Belenois thysa (Hopffer, 1855). Dickson & Kroon, 1978.

Belenois (Belenois) thysa (Hopffer, 1855). Pringle *et al.*, 1994: 294.



Belenois thysa thysa. Male (Wingspan 57 mm). Left – upperside; right – underside.
Kosi Bay, KwaZulu-Natal, South Africa. 26 February 2010. M. Williams.
Images M.C. Williams ex Williams Collection.



Belenois thysa thysa. Female (Wingspan 60 mm). Left – upperside; right – underside.
Umdoni Park, KwaZulu-Natal, South Africa. 30 December 2003. J. Dobson
Images M.C. Williams ex Williams Collection.



Belenois thysa thysa. Female (Wingspan 58 mm). Left – upperside; right – underside.
La Lucia, near Durban, KwaZulu-Natal, South Africa. 30 June 1975. M. Williams.
Images M.C. Williams ex Dobson Collection.

Alternative common name: False Dotted Border White.

Type locality: No locality given.

Distribution: Sudan, Ethiopia, Somalia, Uganda, Kenya, Tanzania, Malawi, Democratic Republic of Congo, Zambia, Angola, Mozambique, Zimbabwe, South Africa, Swaziland (Duke *et al.*, 1999).

Habitat: Warm forests, including coastal forests, in the eastern Afrotropical Region. Also dense savanna (Larsen, 1991c). In Tanzania *ssp. thysa* is found at altitudes from sea-level to 2 600 m and *ssp. meldolae* from 800 to 1 700 m (Kielland, 1990d).

Habits: This is a common species (Larsen, 1991c). Males fly rapidly along forest edges or in sunny glades, infrequently alighting on vegetation or on the ground (Pringle *et al.*, 1994). Females fly more slowly and keep to the undergrowth. Both sexes are fond of flowers. Males have been seen mudpuddling. This species is believed to be a mimic of species of the genus *Mylothris*, the latter having been shown to be unpalatable to birds (Carpenter, 1941).

Flight period: All year but commoner in summer. There are distinct wet- and dry-season forms (Pringle *et al.*, 1994).

Early stages:

Migdoll, 1987: photographs 196a (larva) & 196b (pupa).

Clark, in Pringle *et al.*, 1994: plate 18, p. 374.

“The eggs are laid singly on the edge of young shoots. They are 0,6 mm in diameter and 1,6 mm high. When first laid they are a pale yellow, but become pale salmon with a yellow base. The 10 longitudinal ribs extending all the way to the micropyle are braced by 25 to 26 cross ribs. The young larva eats its way out near the

top of the egg. It rests on the surface of a leaf and feeds at intervals on the edge. The larva moults where it feeds and eats the discarded skin. Larva: On emergence 1,5 mm, egg duration five days. 1st instar 1,5 mm to 4,0 mm in four days; 2nd instar 4,0 mm to 6,0 mm in four days; 3rd instar 6,0 mm to 10,0 mm in five days; 4th instar 10,0 mm to 17,5 mm in five days; 5th instar 17,5 mm to 36,5 mm in 10 days. Pupa 26,0 mm hatched after 11 to 15 days. The pupa is attached, head upwards, by the cremastral hooks and a silken girdle around the middle.”

Henning, Henning, Joannou & Woodhall, 1997: 329 (photograph of final instar larva and pupa).

Larval food:

Boscia species (Capparaceae) [Dickson & Kroon, 1978].

Capparis species (Capparaceae) [Dickson & Kroon, 1978].

Maerua species (Capparaceae) [Larsen, 1991c: 141].

Maerua racemulosa (A.DC.) Gilg & Gilg-Ben. (Capparaceae) [Williams, *vide* Pringle *et al.*, 1994: 294].

Ritchiea species (Capparaceae) [Kielland, 1990d: 62; Larsen, 1991c: 141; Shimba Hills].

***Belenois thysa thysa* (Hopffer, 1855)#
False Dotted Border**

Pieris thysa Hopffer, 1855. *Berichte über die zur Bekanntmachung geeigneten Verhandlungen der Königl. Preuss. Akademie der Wissenschaften zu Berlin* **1855**: 639 (639-643).

Pieris thysa Hopffer, 1855. Trimen & Bowker, 1889.

Belenois thysa Hopffer. Swanepoel, 1953a.

Belenois thysa (Hopffer, 1855). Dickson & Kroon, 1978.

Belenois (Belenois) thysa thysa (Hopffer, 1855). Pringle *et al.*, 1994: 294.



Belenois thysa thysa. Male (Wingspan 57 mm). Left – upperside; right – underside.
Kosi Bay, KwaZulu-Natal, South Africa. 26 February 2010. M. Williams.
Images M.C. Williams ex Williams Collection.



Belenois thysa thysa. Female (Wingspan 60 mm). Left – upperside; right – underside.
Umdoni Park, KwaZulu-Natal, South Africa. 30 December 2003. J. Dobson
Images M.C. Williams ex Williams Collection.



Belenois thysa thysa. Female (Wingspan 58 mm). Left – upperside; right – underside.
La Lucia, near Durban, KwaZulu-Natal, South Africa. 30 June 1975. M. Williams.
Images M.C. Williams ex Dobson Collection.

Type locality: No locality given.

Distribution: Kenya (coast, east), Tanzania, Malawi, Democratic Republic of Congo (Shaba), Zambia, Angola (Mendes *et al.*, 2018), Mozambique, Zimbabwe (eastern border), South Africa (Mpumalanga, KwaZulu-Natal, Eastern Cape Province), Swaziland (Duke *et al.*, 1999).

Specific localities:

Kenya – Kilifi (Stoneham, 1957); Kibwezi (Stoneham, 1957); coast (Larsen, 1991c); Nairobi (Larsen, 1991c); Ngong (Larsen, 1991c); Shimba Hills (Larsen, 1991c).

Tanzania – Throughout the northern, eastern and southern parts but not common in the Northern Highlands (Kielland, 1990d); Balangada (Rebel & Rogenhofer, 1894); Zanzibar (Weymer, 1903); Muanza (Suffert, 1904); Tassamaganga (Neustetter, 1916); Usamabara (Dufrane, 1947); Turiani (Stoneham, 1957); Semdoe Forest Reserve (Doggart *et al.*, 2001).

Malawi – Nyika N.P. (J. Timberlake, pers. comm., 2019).

Democratic Republic of Congo – Mulundu River (Dufrane, 1947).

Zambia – Ikelenge (Heath *et al.*, 2002); Mwinilunga (Heath *et al.*, 2002); Mufulira (Heath *et al.*, 2002); Luwingu (Heath *et al.*, 2002); Mbala (Heath *et al.*, 2002).

Mozambique – Amatongas (Pringle *et al.*, 1994); Beira (Pringle *et al.*, 1994); Dondo (Pringle *et al.*, 1994); Maputo (Pringle *et al.*, 1994); Xiluvo (Pringle *et al.*, 1994).

Mpumalanga – Barberton (Swanepoel, 1953); Letaba (Swanepoel, 1953).

KwaZulu-Natal – Pietermaritzburg (Swanepoel, 1953); Eshowe (Swanepoel, 1953); St. Lucia Bay (Swanepoel, 1953); Burman Bush, Durban (Swanepoel, 1953); Emanguzi Forest (Pringle *et al.*, 1994); Gwaliweni Forest (Pringle *et al.*, 1994); Lake Sibayi (Pringle *et al.*, 1994); Saint Winifreds (Pringle *et al.*, 1994); Tongaat (Duke); Tugela River Mouth (Pringle *et al.*, 1994); Umdoni Park (Pringle *et al.*, 1994); Umhlanga Rocks (Pringle *et al.*, 1994); Kosi Bay Nature Reserve (Pringle & Kyle, 2002); Tembe Nature Reserve (Pringle & Kyle, 2002); Peace Cottage (male illustrated above).

Eastern Cape Province – Baziya (Swanepoel, 1953); Embotyi (Pringles); Port St Johns (Steenkamp).

balangensis Rebel & Rogenhofer, 1894 (as var. of *Belenois thysa*). *In*: Baumann, O., *Durch Massailand zur Nilquelle. Reisen und Forschungen der Massai-Expedition des deutschen Antisklaverei-Komitee in den Jahren 1891-1893*: 326 (323-341). Tanzania: “Balangada”.

obumbrata Weymer, 1903 (as var. of *Pieris thysa*). *Deutsche Entomologische Zeitschrift, Iris* **16**: 228 (221-235). Tanzania: “Zanzibar”.

alarmi Suffert, 1904 (as ssp. of *Pieris larima*). *Deutsche Entomologische Zeitschrift, Iris* **17**: 81 (12-107). Tanzania: “Muanza, Süd-Victoria Nyanza”.

macularia Aurivillius, 1910 *in* Seitz, 1908-25 (as ab. of *Pieris thysa*). *Die Gross-Schmetterlinge der Erde, Stuttgart* (2) **13** *Die Afrikanischen Tagfalter*: 43 (614 pp.). Tanzania: “German East Africa”.

tassamagangae Neustetter, 1916 (as ab. of *Pieris thysa* var. *balangensis*). *Deutsche Entomologische Zeitschrift, Iris* **30**: 96 (95-108). Tanzania: “Tassamaganga, D.O. Afrika”.

reducta Dufrane, 1947 (as ab. of *Belenois thysa thysa*). *Bulletin et Annales de la Société Royale Entomologique de Belgique* **83**: 49 (46-73). Tanzania: “Usambara”.

blariauxi Dufrane, 1947 (as ab. of *Belenois thysa thysa*). *Bulletin et Annales de la Société Royale Entomologique de Belgique* **83**: 49 (46-73). Democratic Republic of Congo: “rivière Mulundu, affluent de la Longatshimo, 85 km. de Sshikapa, Kasai”.

rosmaria Stoneham, 1957 (as female f. of *Belenois thysa*). *Bulletin of the Stoneham Museum* (69): [1] ([4 pp.]). Kenya: “Kilifi, Kenya Coast”.

agatha Stoneham, 1957 (as female f. of *Belenois thysa*). *Bulletin of the Stoneham Museum* (69): [1] ([4 pp.]). Kenya: “Kibwezi”.

arethusia Stoneham, 1957 (as female f. of *Belenois thysa*). *Bulletin of the Stoneham Museum* (69): [1] ([4 pp.]). South Africa: “Durban”.

calliope Stoneham, 1957 (as female f. of *Belenois thysa*). *Bulletin of the Stoneham Museum* (69): [2] ([4 pp.]). Tanzania: “Turiani, Tanganyika”.

vansoni Pennington, 1978 (as f. of *Belenois thysa*). *Butterflies of southern Africa* [eds C.G.C. Dickson and D.M. Kroon] 170 (670 pp.). Johannesburg. South Africa: “Peace Cottage (15 miles [24 km] north of Durban)”.

***Belenois thysa meldolae* Butler, 1872**
Angola Dotted-border Caper White

Belenois meldolae Butler, 1872. *Proceedings of the Zoological Society of London* **1871**: 725 (721-725).



Belenois thysa meldolae. Male. Left – upperside; right – underside.
Tumani River. 1 42N, 30 07E, DRC.19 March 2016. T. Desloges.
Images courtesy Thomas Desloges.

Type locality: Angola: “Loanda”.

Diagnosis: Compared to the nominate subspecies, the forewing upperside subapical black spots are less well developed or even absent and there are no submarginal spots (Kielland, 1990d).

Distribution: Angola, Democratic Republic of Congo (Kivu), Sudan (south), Uganda, Kenya (west), Tanzania (west).

Specific localities:

Angola – Loanda (TL).

Democratic Republic of Congo – Loango (Suffert, 1904); Chinchoxo (Suffert, 1904); Semuliki Valley (Ducarme, 2018); Mt Mitumba (Ducarme, 2018); Mt Blue (Ducarme, 2018).

Uganda – Bugundi (Suffert, 1904); S. Albert (Suffert, 1904); Njansa (Suffert, 1904); Kalinzu Forest (Stoneham, 1957); Semuliki N.P. (Davenport & Howard, 1996).

Kenya – Mara River, Masai Reserve (Talbot, 1943); Alego (Stoneham, 1957); Nyanza (Stoneham,

1957).

Tanzania – Mpanda to the Ugandan border (Kielland, 1990d); Geita (Stoneham, 1957).

rimala Suffert, 1904 (as ssp. of *Pieris larima*). *Deutsche Entomologische Zeitschrift, Iris* **17**: 80 (12-107). Uganda: “Bugundi, S. Albert, Njansa”.

malaria Suffert, 1904 (as ssp. of *Pieris larima*). *Deutsche Entomologische Zeitschrift, Iris* **17**: 81 (12-107). Democratic Republic of Congo: “Loango; Chinchoxo”.

angustimargo Talbot, 1943 (as f. of *Belenois thysa malaria*). *Annals and Magazine of Natural History* (11) **10**: 321 (305-336). Kenya: “Mara River, Masai Reserve”.

alegona Stoneham, 1957 (as female f. of *Belenois thysa*). *Bulletin of the Stoneham Museum* (69): [1] ([4 pp.]). Kenya: “Alego, Nyanza, W. Kenya”.

biton Stoneham, 1957 (as male f. of *Belenois thysa*). *Bulletin of the Stoneham Museum* (69): [2] ([4 pp.]). Tanzania: “Geita, Tanganyika”.

cleobis Stoneham, 1957 (as male f. of *Belenois thysa*). *Bulletin of the Stoneham Museum* (69): [2] ([4 pp.]). Uganda: “Kalinzu Forest, Uganda Prot.”.

Belenois thysa tricolor Talbot, 1943 Abyssinian Dotted-border Caper White

Belenois thysa tricolor Talbot, 1943. *Annals and Magazine of Natural History* (11) **10**: 333 (305-336).

Type locality: Ethiopia: “Abyssinia”.

Distribution: Ethiopia, Somalia.

Specific localities:

Ethiopia – Baro (TL; Ungemach, 1932).

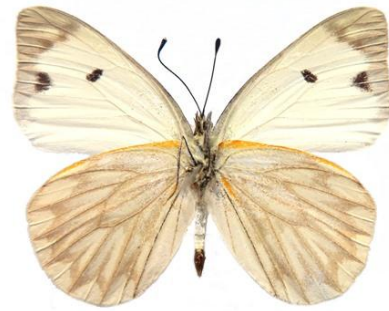
tricolor Ungemach, 1932 (as f. of *Pieris thysa*). *Mémoires de la Société des Sciences Naturelles (et Physiques) du Maroc* **32**: 34 (1-122). Ethiopia: “Baro”.

**Belenois victoria* Dixey, 1915 Veined Caper White



Veined Caper White (*Belenois victoria*). Minziro, Tanzania.
Image courtesy Sudheer Kommana.

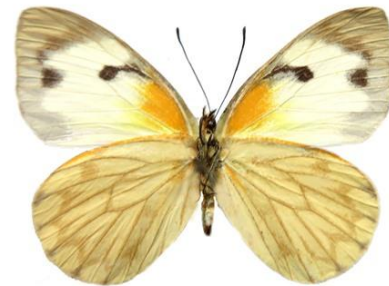
Belenois victoria Dixey, 1915. *Transactions of the Entomological society of London* **1915**: 4 (1-15).



Belenois victoria victoria. Male. Left – upperside; right – underside.
Mau Forest, Kericho, Kenya. March 2012. PN, EE. ABRI-2019-2862.
Images M.C. Williams ex ABRI Collection.



Belenois victoria victoria. Female. Left – upperside; right – underside.
Mau Forest, Kericho, Kenya. March 2012. PN, EE. ABRI-2019-2864.
Images M.C. Williams ex ABRI Collection.



Belenois victoria victoria. Female. Left – upperside; right – underside.
Mau Forest, Kericho, Kenya. March 2012. PN, EE. ABRI-2019-2863.
Images M.C. Williams ex ABRI Collection.

Type locality: [Uganda]: “Toro”; Kenya: “Tiriki, Victoria Nyanza”.

Distribution: Democratic Republic of Congo, Uganda, Rwanda, Burundi, Kenya, Tanzania.

Habitat: Forest, including riparian forest. In Tanzania *ssp. schoutedeni* occurs at altitudes from 1 100 to 1 700 m (Kielland, 1990d).

Habits: Appears to spend most of its time high up in the forest canopy but males come down to drink at damp spots (Kielland, 1990d; Larsen, 1991c). Females keep to the forest undergrowth and are thus rarely seen (Kielland, 1990d).

Early stages: Nothing published.

Larval food:

Capparis tomentosa Lam. (Capparaceae) [Van Someren, 1974: 317].

Maerua species (Capparaceae) [Van Someren, 1974: 317].

Ritchiea species (Capparaceae) [Larsen, 1991c: 140].

Belenois victoria victoria Dixey, 1915
Veined Caper White

Belenois victoria Dixey, 1915. *Transactions of the Entomological society of London* **1915**: 4 (1-15).



Belenois victoria victoria. Male. Left – upperside; right – underside.
Mau Forest, Kericho, Kenya. March 2012. PN, EE. ABRI-2019-2862.
Images M.C. Williams ex ABRI Collection.



Belenois victoria victoria. Female. Left – upperside; right – underside.
Mau Forest, Kericho, Kenya. March 2012. PN, EE. ABRI-2019-2864.
Images M.C. Williams ex ABRI Collection.



Belenois victoria victoria. Female. Left – upperside; right – underside.
Mau Forest, Kericho, Kenya. March 2012. PN, EE. ABRI-2019-2863.
Images M.C. Williams ex ABRI Collection.

Type locality: [Uganda]: “Toro”; Kenya: “Tiriki, Victoria Nyanza”.

Distribution: Uganda, Kenya (highlands west of the Rift Valley).

Specific localities:

Uganda – Toro (TL); Mpanga Forest (Joicey & Talbot, 1927).

Kenya – Tiriki (Dixey, 1915); Yala River, S. edge of Kakumba Forest (Joicey & Talbot, 1927); Mount Elgon (Neustetter, 1929); Trans-Nzoia (1932).

boguenoides Joicey & Talbot, 1927 (as f. of *Pieris crawshayi*). *Encyclopédie Entomologique* (B.3. Lepidoptera) **2**: 7 (1-14). Uganda: “Mpanga Forest, Toro”; “E. Africa”.

andromorpha Joicey & Talbot, 1927 (as female f. of *Pieris crawshayi boguenoides*). *Encyclopédie Entomologique* (B.3. Lepidoptera) **2**: 7 (1-14). Uganda: “Mpanga Forest, Toro, 4800 feet”.

bicolor Joicey & Talbot, 1927 (as female f. of *Pieris crawshayi boguenoides*). *Encyclopédie Entomologique* (B.3. Lepidoptera) **2**: 8 (1-14). Kenya: “Brit. E. Africa, Yala River, S. edge of Kakumba Forest, 4800-5300 feet”.

nigrimacula Joicey & Talbot, 1927 (as female f. of *Pieris crawshayi boguenoides*). *Encyclopédie Entomologique* (B.3. Lepidoptera) **2**: 8 (1-14). Kenya: “Brit. E. Africa, Yala River, S. edge of Kakumba Forest, 4800-5300 feet”; Uganda: “Mpanga Forest, Toro, 4800 feet”.

unicolor Joicey & Talbot, 1927 (as female f. of *Pieris crawshayi boguenoides*). *Encyclopédie Entomologique* (B.3. Lepidoptera) **2**: 8 (1-14). Uganda: “Mpanga Forest, Toro, 4800 feet”.

chromiphora Joicey & Talbot, 1927 (as female f. of *Pieris crawshayi boguenoides*). *Encyclopédie Entomologique* (B.3. Lepidoptera) **2**: 8 (1-14). Uganda: “Mpanga Forest”.

elgonensis Neustetter, 1929 (as sp. of *Pieris*). *Internationale Entomologische Zeitschrift* **22**: 389 (389-392). Kenya: “Ostafrika, Mt. Elgon”.

dixeyi Stoneham, 1932 (as female f. of *Belenois victoria*). *Bulletin of the Stoneham Museum* (8): [1] ([1 p.]). Kenya: “Trans-Nzoia”.

Belenois victoria hecqi Berger, 1953

Nioka Veined Caper White

Belenois victoria hecqi Berger, 1953. *Revue de Zoologie et de Botanique Africaine* **48**: 209 (209-210).



Belenois victoria hecqi. Male. Left – upperside; right – underside.
Bana, n. Nioka, Ituri, DRC.2 15N, 30 34E. 18 July 2018. T. Desloges.
Images courtesy Thomas Desloges.



Belenois victoria hecqi. Female. Left – upperside; right – underside.
Bana, n. Nioka, Ituri, DRC.2 15N, 30 34E. 18 July 2018. T. Desloges.
Images courtesy Thomas Desloges.

Type locality: [Democratic Republic of Congo]: “Kibali-Ituri, Nioka”. Holotype and allotype in the Royal Museum for Central Africa, Tervuren, Belgium.

Distribution: Democratic Republic of Congo (Ituri).

Specific localities:

Democratic Republic of Congo – Nioka (TL); Mt Blue (Ducarme, 2018).

Belenois victoria schoutedeni Berger, 1953
Central Veined Caper White

Belenois victoria schoutedeni Berger, 1953. *Revue de Zoologie et de Botanique Africaine* **48**: 210 (209-210).



Belenois victoria schoutedeni. Female. Left – upperside; right – underside.
Nyungwe National Park, Rwanda. August 2007. Vingerhoedt, vd Weghe. ABRI-2019-2865.
Images M.C. Williams ex ABRI Collection.



Belenois victoria schoutedeni. Female. Left – upperside; right – underside.
Nyungwe National Park, Rwanda. June 2009. PN. ABRI Leg. ABRI-2019-2866.
Images M.C. Williams ex ABRI Collection.

Type locality: [Democratic Republic of Congo]: “Kivu, Kahusha”. Holotype in the Royal Museum for Central Africa, Tervuren, Belgium.

Distribution: Uganda (west), Rwanda, Burundi, Democratic Republic of Congo (east – Kivu), Tanzania (west).

Specific localities:

Rwanda – Kabira Forest (Joicey & Talbot, 1927).

Democratic Republic of Congo – Kahusha (TL); Mt Mitumba (Ducarme, 2018).

Tanzania – Mpanda (Kielland, 1990d); Kigoma (Kielland, 1990d); Katavi National Park (Fitzherbert *et al.*, 2006).

kivuensis Joicey & Talbot, 1927 (as female f. of *Pieris crawshayi boguensis*). *Encyclopédie Entomologique* (B.3. Lepidoptera) 2: 8 (1-14). Rwanda: “Kabira Forest, Ruanda District, 12 miles north of Usambara, north end Lake Tanganyika, 7000 ft”.

holochroma Joicey & Talbot, 1927 (as female f. of *Pieris crawshayi boguensis*). *Encyclopédie Entomologique* (B.3. Lepidoptera) 2: 9 (1-14). Rwanda: “Kabira Forest, Ruanda, 12 miles north of Usambara, 7000 ft”.

****Belenois welwitschii* Rogenhofer, 1890**
Black-streaked Caper White

Belenois welwitschii Rogenhofer, 1890. *Annalen des (K.K.) Naturhistorischen Museums. Wien* 4: 548 (547-554).

Belenois calypso welwitschii Rogenhofer, 1890. Ackery *et al.*, 1995: 200.

Belenois welwitschii Rogenhofer, 1890. Congdon & Collins, 1998: 29.



Belenois welwitschii welwitschii. Male. Left – upperside; right – underside.
Zambia. June 1962. NA Brauer. ABRI-2019-2886.
Images M. Williams ex ABRI Collection.



Belenois welwitschii welwitschii. Female. Left – upperside; right – underside.
Rubondo Island, Tanzania. August 1989. SCC. ABRI-2019-2888.

Images M. Williams ex ABRI Collection.



Belenois welwitschii welwitschii. Female. Left – upperside; right – underside.
Rubondo Island, Tanzania. August 1989. SCC. ABRI-2019-2887.

Images M. Williams ex ABRI Collection.



Belenois welwitschii welwitschii. Female. Left – upperside; right – underside.
Urumura Forest, Tabora, Tanzania. August 2002. S Norman. ABRI-2019-2889.

Images M. Williams ex ABRI Collection.

Type locality: Angola: “Kibondo”.

Diagnosis: Male differs from the male of *B. calypso* as follows: forewing upperside with black streak at end of cell better developed; hindwing underside with black spot at end of cell better developed. Female highly variable – white to yellow and orange to red in either or both pairs of wings (Congdon & Collins, 1998).

Distribution: Angola, Democratic Republic of Congo, Tanzania, Malawi, Zambia.

Habitat: Forest. Also in *Brachystegia* woodland (Kielland, 1990d). In Tanzania at altitudes from 780 to 1 700 m (Kielland, 1990d).

Habits: Flies rapidly, frequently stopping to feed from flowers on the woodland floor (Kielland, 1990d).

Early stages: Nothing published.

Larval food:

Maerua species (Capparaceae) [Kielland, 1990d: 60; ssp. *shaba*; in error for *B. calypso*].

Cadaba species (Capparaceae) [Kielland, 1990d: 60; ssp. *shaba*; in error for *B. calypso*].

Belenois welwitschii welwitschii Rogenhofer, 1890
Black-streaked Caper White

Belenois welwitschii Rogenhofer, 1890. *Annalen des (K.K.) Naturhistorischen Museums. Wien* 4: 548 (547-554).

Belenois calypso welwitschii Rogenhofer, 1890. Ackery *et al.*, 1995: 200.

Belenois welwitschii Rogenhofer, 1890. Congdon & Collins, 1998: 29.



Belenois welwitschii welwitschii. Male. Left – upperside; right – underside.
Zambia. June 1962. NA Brauer. ABRI-2019-2886.
Images M. Williams ex ABRI Collection.



Belenois welwitschii welwitschii. Female. Left – upperside; right – underside.
Rubondo Island, Tanzania. August 1989. SCC. ABRI-2019-2888.
Images M. Williams ex ABRI Collection.



Belenois welwitschii welwitschii. Female. Left – upperside; right – underside.
Rubondo Island, Tanzania. August 1989. SCC. ABRI-2019-2887.
Images M. Williams ex ABRI Collection.



Belenois welwitschii welwitschii. Female. Left – upperside; right – underside.
Urumura Forest, Tabora, Tanzania. August 2002. S Norman. ABRI-2019-2889.
Images M. Williams ex ABRI Collection.

Type locality: Angola: “Kibondo”.

Distribution: Angola (north-east), Democratic Republic of Congo (Shaba), Tanzania (west), Malawi, Zambia.

Specific localities:

Angola – Kibondo (TL); N’Dalla Tando (Talbot, 1943); Cassuaballa (Talbot, 1943).

Tanzania – Mandera (Weymer, 1903); Nyangao (Suffert, 1904); Bismarckburg (Strand, 1911); Bukoba (Rebel, 1914); Rubeho (female A illustrated above); Sibweza, Mpanda (female B illustrated above).

Zambia – Kitungulu (Strand, 1911); Near Mwinilunga; Mwinilunga-Solwezi road at East Lumwana and Mombezi Rivers (Heath *et al.*, 2002).

hospitis Weymer, 1903 (as sp. of *Pieris*). *Deutsche Entomologische Zeitschrift, Iris* **16**: 226 (221-235). Tanzania: “Mandera (Deutsch-Ost-Afrika)”.

ratidengi Suffert, 1904 (as ssp. of *Pieris dentigera*). *Deutsche Entomologische Zeitschrift, Iris* **17**: 128 (124-132). Tanzania: “Nyangao, westlich von Lindi, Deutsch-Ost-Afrika”.

conjunctiata Strand, 1911 (as ab. of *Pieris welwitschi*). *Mitteilungen aus dem Zoologischen Museum in Berlin* **5**: 291 (275-304). Tanzania: “Bismarckburg, S. Tanganyika”.

muenzneri Strand, 1911 (as ab. of *Pieris welwitschi*). *Mitteilungen aus dem Zoologischen Museum in Berlin* **5**: 291 (275-304). Zambia: “Kitungulu”.

lutea Rebel, 1914 (as ab. of *Pieris subeida* f. *sylvander*). *Annalen des (K.K.) Naturhistorischen Museums. Wien* **28**: 227 (219-294). Tanzania: “Bukoba”.

unilutea Rebel, 1914 (as ab. of *Pieris subeida* f. *sylvander*). *Annalen des (K.K.) Naturhistorischen Museums. Wien* **28**: 227 (219-294). Tanzania: “Bukoba”.

infumata Rebel, 1914 (as ab. of *Pieris subeida* f. *sylvander*). *Annalen des (K.K.) Naturhistorischen Museums. Wien* **28**: 227 (219-294). Tanzania: “Bukoba”.

pauper Hulstaert, 1924 (as female ab. of *Pieris calypso welwitschi*). *Revue de Zoologie et de Botanique Africaine* **12**: 97 (90-99). Democratic Republic of Congo: “Congo Belge”. Holotype in the Royal Museum for Central Africa, Tervuren, Belgium.

albivena Talbot, 1943 (as female f. of *Belenois calypso welwitschi*). *Annals and Magazine of Natural History* (11) **10**: 318 (305-336). Angola: “N’Dalla Tando, 2700 feet”.

citrinescens Talbot, 1943 (as female f. of *Belenois calypso welwitschi*). *Annals and Magazine of Natural History* (11) **10**: 319 (305-336). Angola: “Cassuaballa”.

aglaia Stoneham, 1957 (as female f. of *Belenois calypso*). *Bulletin of the Stoneham Museum* (69): [1] ([4 pp.]). Democratic Republic of Congo: “Congo”.

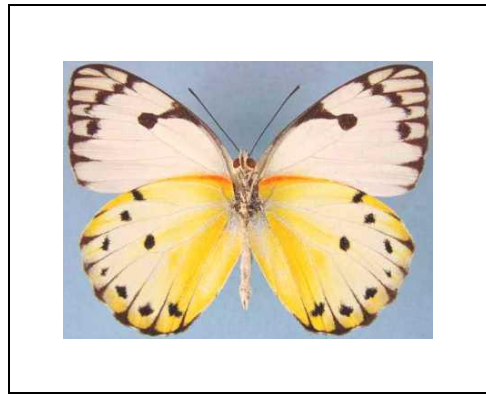
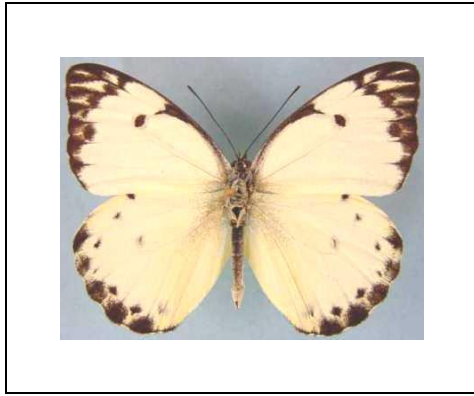
Belenois welwitschii shaba Berger, 1981

Mpala Black-streaked Caper White

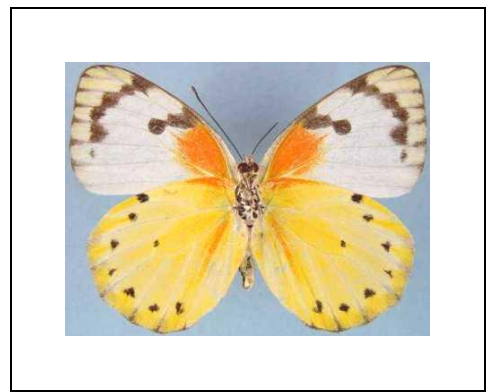
Belenois calypso shaba Berger, 1981. *Les Papillons du Zaïre* 60 (543 pp.). Bruxelles. [Comb. nov., Congdon & Collins, 1998: 29].

Belenois calypso shaba Berger, 1981. Ackery *et al.*, 1995: 200.

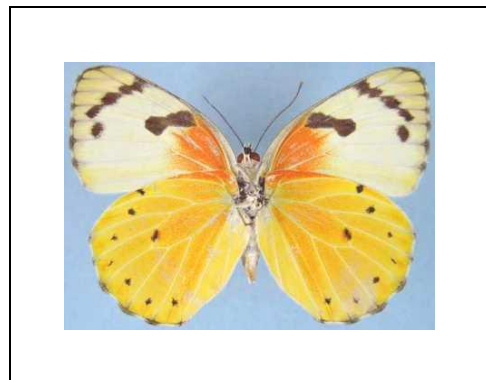
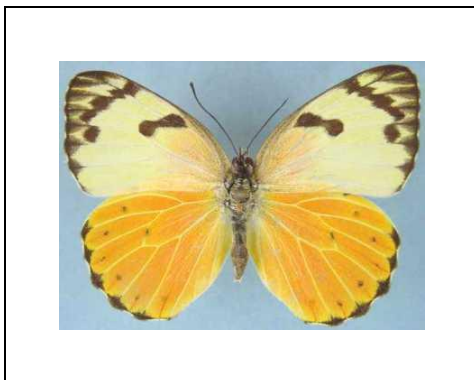
Belenois welwitschii shaba Berger, 1981. Congdon & Collins, 1998: 29.



Belenois welwitschii shaba. Male. Left – upperside; right – underside.
Wingspan: 61mm. N.E. Zambia, viewpoint near Kalambo Falls. About 1800 m. 9.VII.1970. J.C. Little.
(Newport Collection).



Belenois welwitschii shaba. Female A. Left – upperside; right – underside.
Wingspan: 59mm. Zambia, viewpoint near Kalambo Falls. About 1800 m. 14.V.1971. J.C. Little.
(Newport Collection).



Belenois welwitschii shaba. Female B. Left – upperside; right – underside.
Wingspan: 54mm. Zambia, viewpoint near Kalambo Falls. About 1800 m. 14.V.1971. J.C. Little.
(Newport Collection).

Type locality: [Democratic Republic of Congo]: “Mpala”. Holotype in the Royal Museum for Central Africa, Tervuren, Belgium.

Diagnosis: Males heavily marked in the wet-season form and veins on underside often heavily dusted with black (Congdon & Collins, 1998).

Distribution: Democratic Republic of Congo (west Shaba, extreme south Maniema), Tanzania, Zambia.

Specific localities:

Democratic Republic of Congo – Mpala (TL).

Tanzania – From Mbeya Region in the south to Mpanda, Kigoma and Lake Victoria in the north (Kielland, 1990d; Congdon & Collins, 1998); Biharamulo Game Reserve (Congdon & Collins, 1998); Katavi National Park (Fitzherbert *et al.*, 2006).

Zambia – Mbala (Heath *et al.*, 2002); Samfya (Heath *et al.*, 2002); Kalombo Falls (male and females illustrated above).

****Belenois zochalia* (Boisduval, 1836)#**
Forest Caper White



Forest Caper White (*Belenois zochalia*). Left: Male. Centre: Female. Right: Male of form *immaculata*.
Images courtesy Steve Woodhall.

Pieris zochalia Boisduval, 1836. In: [Roret, Suites à Buffon] *Histoire naturelle des Insectes. Species général des Lépidopteres* 1: 506 (690 pp.). Paris.

Pieris zochalia Boisduval. Trimen, 1862c.

Pieris zochalia Boisduval, 1836. Trimen & Bowker, 1889.

Belenois zochalia Boisduval. Swanepoel, 1953a.

Belenois zochalia (Boisduval, 1836). Dickson & Kroon, 1978.

Belenois (Belenois) zochalia (De Boisduval, 1836). Pringle *et al.*, 1994: 295.



Belenois zochalia zochalia. Male (Wingspan 46 mm). Left – upperside; right – underside.
Linwood Forest, KwaZulu-Natal, South Africa. 12 February 2006. J. Dobson.
Images M.C. Williams ex Dobson Collection.



Belenois zochalia zochalia form *immaculata*. Male (Wingspan 45 mm). Left – upperside; right – underside.
Rustenberg Nature Reserve, North-West Province, South Africa. 12 April, 1998. M. Williams.
Images M.C. Williams ex Williams Collection.



Belenois zochalia zochalia. Female (white form) (Wingspan 56 mm). Left – upperside; right – underside.
Buzzard Mountain Retreat, Limpopo Province, South Africa. Emerged May 1997. M. Williams.
Images M.C. Williams ex Williams Collection.



Belenois zochalia zochalia. Female (pale yellow form) (Wingspan 55 mm). Left – upperside; right – underside.
Buzzard Mountain Retreat, Limpopo Province, South Africa. Emerged May 1997. M. Williams.
Images M.C. Williams ex Williams Collection.



Belenois zochalia zochalia. Female (Wingspan 60 mm). Left – upperside; right – underside.
Lekgalameetse Nature Reserve, Limpopo Province, South Africa. 6 January 2012. M. Williams.
Images M.C. Williams ex Williams Collection.

Alternative common names: Large Caper White; Forest Caper White.

Type locality: [South Africa]: “Cafrerie, pays des Arténiquois”.

Diagnosis: Both sexes are rather variable, both geographically and within specific populations (Pringle *et al.*, 1994).

Distribution: Nigeria, Cameroon, Democratic Republic of Congo, Uganda, Ethiopia, Kenya, Tanzania, Malawi, Zambia, Mozambique, Zimbabwe, Namibia, South Africa, Swaziland.

Habitat: Forest and dense, moist woodland. In western Tanzania also in open montane grassland (Kielland, 1990d). In Tanzania ssp. *agrippinides* is found at altitudes from 300 to 2 700 m (Kielland, 1990d). In West Africa it is a submontane species, found above 1 300 m (Larsen, 2005a).

Habits: Males fly rapidly along forest edges or in sunny clearings (Pringle *et al.*, 1994). Females fly much more slowly and keep to the undergrowth below the trees. Both sexes feed from flowers. Males readily mudpuddle (Larsen, 2005a). Communal nocturnal roosting, often together with other pierids (*Colotis*, *Dixeia*, *Pinacopteryx* and other species of *Belenois*), has been recorded by Larsen (1991). Occasionally there are large-scale migrations of this butterfly (Larsen, 1991c).

Flight period: All year but, in cooler areas, specimens are scarce during the winter months.

Early stages:

Clark, in Van Son, 1949: 176.

Egg elongate-conical; 1 mm high and 0,5 mm diameter; about 12 longitudinal ribs ending in slight points at micropylar end; yellowish orange; laid singly; egg stage 8 days. Five larval instars lasting 30 days. First instar larva 2 mm in length; yellow; head about 0,475 mm; anterior setae of lateral ridge black on white moles; posterior setae smaller, white on white moles; prolegs with the shield blackened and with the spines of equal length. In later instars colour changes to green. Final instar with three distinct colour forms: 1. Yellow-green with yellow spiracular line edged with dark green above; pale green ventrally. 2. dark green with yellow spiracular line. 3. broad yellow dorsal stripe with pale central dorsal line edged with brown; black lateral stripe; yellow spiracular stripe edged with brown below; pale dull green ventrally. Pupa 20-21 mm long; pale or dark green; cephalic projection narrow, as long as head; thoracic keel raised to an angle; wing-cases not prominent and rather widely spread; third abdominal tergite with acute dorso-lateral, obliquely ascending spines, which are connected with the posterior end by low carinae along the sides; pupal period about 20 days.

Clark, in Pringle *et al.*, 1994: plate 19, p.376.

“The yellowish-orange eggs are laid singly on the foodplant. They are 0,5 mm in diameter and 1,0 mm high. There are 12 longitudinal ribs. The egg stage lasts eight days. There are five larval instars with a duration of 30 days. The pupa is attached, head upwards, by the cremastral hooks and a silken girdle around the middle. The pupal stage lasts about 20 days.”

Henning, Henning, Joannou & Woodhall, 1997: 332 (photograph of final instar larva and pupa).

Larval food:

Boscia oleioides (Burch. ex DC.) Toelken (Capparaceae) [Dickson & Kroon, 1978].

Brassica species (Brassicaceae) [Larsen, 1991c: 139].

Cadaba species (Capparaceae) [Heath *et al.*, 2002: 31].

Capparis albersi Gilgood (Capparaceae) [Van Someren, 1974: 317].

Capparis cartilaginea Decne. (Capparaceae) [Van Someren, 1974: 317; as *Capparis galeata* Freis].

Capparis viminea Hookf. & Thomson ex Oliv. var. *viminea* (Capparaceae) [Van Someren, 1974: 317; as *Capparis lilacina* Gilgood].

Capparis tomentosa Lam. (Capparaceae) [Van Someren, 1974: 317].

Maerua cafra (DC.) Pax (Capparaceae) [Clark, *vide* Van Son, 1949: 176; as *Maerua triphylla* (Thunb.) Dur. and Schinz].

Maerua triphylla A.Rich. var. *johannis* (Volkens & Gilg) DeWolf (Capparaceae) [Van Someren, 1974: 317; as *Maerua hoenelli* Schweinfurth].

Maerua racemulosa (A.DC.) Gilg & Gilg-Ben. (Capparaceae) [Dickson & Kroon, 1978].

Maerua triphylla A.Rich. (= *cylindricarpa* Gilgood, *pubescens* Gilgood) (Capparaceae) [Van Someren, 1974: 317; as *Maerua variifolia*].

Maerua triphylla A.Rich. (Capparaceae) [Kielland, 1990d: 63; as *Maerua variifolia*].

Niebuhrria species (Capparaceae) [Larsen, 2005a].

Ritchiea species (Capparaceae) [Kielland, 1990d: 63].

Salvadora persica Linnaeus (Salvadoraceae) [Van Someren, 1974: 317].

Belenois zochalia zochalia (Boisduval, 1836)#

Forest Caper White

Pieris zochalia Boisduval, 1836. *In*: [Roret, Suites à Buffon] *Histoire naturelle des Insectes. Species général des Lépidopteres* 1: 506 (690 pp.). Paris.

Pieris zochalia Boisduval. Trimen, 1862c.

Pieris zochalia Boisduval, 1836. Trimen & Bowker, 1889.

Belenois zochalia Boisduval. Swanepoel, 1953a.

Belenois zochalia (Boisduval, 1836). Dickson & Kroon, 1978.

Belenois (Belenois) zochalia zochalia (De Boisduval, 1836). Pringle *et al.*, 1994: 295.



Belenois zochalia zochalia. Male (Wingspan 46 mm). Left – upperside; right – underside.
Linwood Forest, KwaZulu-Natal, South Africa. 12 February 2006. J. Dobson.
Images M.C. Williams ex Dobson Collection.



Belenois zochalia zochalia form *immaculata*. Male (Wingspan 45 mm). Left – upperside; right – underside.
Rustenberg Nature Reserve, North-West Province, South Africa. 12 April, 1998. M. Williams.
Images M.C. Williams ex Williams Collection.



Belenois zochalia zochalia. Female (white form) (Wingspan 56 mm). Left – upperside; right – underside.
Buzzard Mountain Retreat, Limpopo Province, South Africa. Emerged May 1997. M. Williams.
Images M.C. Williams ex Williams Collection.



Belenois zochalia zochalia. Female (pale yellow form) (Wingspan 55 mm). Left – upperside; right – underside.
 Buzzard Mountain Retreat, Limpopo Province, South Africa. Emerged May 1997. M. Williams.
 Images M.C. Williams ex Williams Collection.



Belenois zochalia zochalia. Female (Wingspan 60 mm). Left – upperside; right – underside.
 Lekgalameetse Nature Reserve, Limpopo Province, South Africa. 6 January 2012. M. Williams.
 Images M.C. Williams ex Williams Collection.

Type locality: [South Africa]: “Cafrerie, pays des Arténiquois”.

Distribution: Mozambique, Zimbabwe, Namibia, South Africa (Limpopo Province, Mpumalanga, North West Province, Gauteng, KwaZulu-Natal, Eastern Cape Province, Western Cape Province – south-east), Swaziland.

Specific localities:

Namibia – Caprivi, Katima Mulilo.

Limpopo Province – Zoutpansberg (Le Doux, 1923); Haenertsburg (Swanepoel, 1953); Munnik (Swanepoel, 1953); Warmbaths (Swanepoel, 1953); Lekgalameetse Nature Reserve (“Malta Forest”); Soetdoring Farm [-24.561 28.233] (A. Mayer, pers comm. 2015); Buzzard Mountain Retreat [-23.012 29.765] (Williams, unpub., 2015).

Mpumalanga – Barberton (Swanepoel, 1953); Graskop (Swanepoel, 1953); Buffelskloof Nature Reserve (Williams).

North West Province – Potchefstroom (Swanepoel, 1953); Utopia Resort (C. Dobson, 2006); Kgaswane Mountain Reserve (Williams; male illustrated above).

Gauteng – Johannesburg (Wichgraf, 1914); Pretoria (Swanepoel, 1953); Witwatersrand Botanical Gardens (J. Dobson, unpublished checklist, 2001).

KwaZulu-Natal – Durban (Swanepoel, 1953); Pietermaritzburg (Swanepoel, 1953); Karkloof (Swanepoel, 1953); Balgowan (Swanepoel, 1953).

Eastern Cape Province – Port Elizabeth (Swanepoel, 1953); Van Stadens (Swanepoel, 1953); Alexandria Forest (Swanepoel, 1953); Grahamstown (Swanepoel, 1953); King William’s Town (Swanepoel, 1953); Amabele (Swanepoel, 1953); Bashee River (Swanepoel, 1953); Port St. Johns (Swanepoel, 1953).

Western Cape Province – Knysna (Le Doux, 1923); Wilderness (Swanepoel, 1953); Plettenburg Bay (Swanepoel, 1953); Great Brak River (G. van den Berg).

Swaziland – Malolotja N. R. (www.sntc.org.sz).

hyoma Boisduval, 1836 (as sp. of *Pieris*). In: [Roret, Suites à Buffon] *Histoire naturelle des Insectes. Species général des Lépidopteres* **1**: 508 (690 pp.). Paris. “Côte de Guinea?”.

immaculata Wichgraf, 1913 (as var. of *Pieris zochalia*). *Internationale Entomologische Zeitschrift* **7**: 1913 (9-10, 13-14, 21-22). South Africa: “Höhen südlich von Bromfontein bei Johannesburg”.

pondoana Neustetter, 1916 (as var. of *Pieris zochalia*). *Deutsche Entomologische Zeitschrift, Iris* **30**: 95 (95-108). South Africa: “West-Pondoland”.

flavipennis Neustetter, 1916 (as ab. of *Pieris zochalia* var. *pondoana*). *Deutsche Entomologische Zeitschrift, Iris* **30**: 96 (95-108). South Africa: “West-Pondoland”.

reducta Le Doux, 1923 (as female f. of *Pieris zochalia*). *Deutsche Entomologische Zeitschrift* **1923**: 582 (582-584). South Africa: “Zoutpansberg, Transvaal”.

grisea Le Doux, 1923 (as female f. of *Pieris zochalia*). *Deutsche Entomologische Zeitschrift* **1923**: 583 (582-584). South Africa: “Johannisburg, Transvaal”.

elly Le Doux, 1923 (as f. of *Pieris zochalia*). *Deutsche Entomologische Zeitschrift* **1923**: 583 (582-584). South Africa: “Knysna-Wald, Kapkolonie”.

silvano Stoneham, 1957 (as female f. of *Belenois zochalia*). *Bulletin of the Stoneham Museum* (68): [4] ([4 pp.]). South Africa: “Balgowan, Natal”.

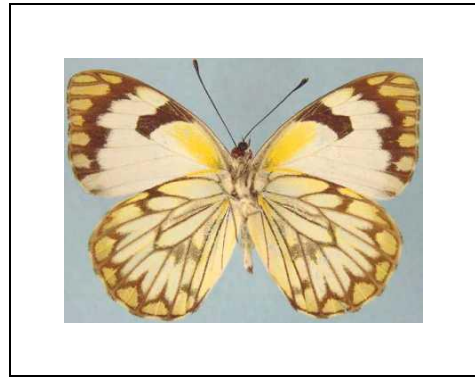
marjoria Stoneham, 1957 (as female f. of *Belenois zochalia*). *Bulletin of the Stoneham Museum* (68): [4] ([4 pp.]). South Africa: “Balgowan”.

***Belenois zochalia agrippinides* (Holland, 1896)**
Eastern Forest Caper White

Pieris agrippinides Holland, 1896. *Proceedings of the United States National Museum* **18**: 758 (741-767).



Belenois zochalia agrippinides. Male. Left – upperside; right – underside.
Bana, n. Nioka, Ituri, DRC.2 15N, 30 34E. 18 July 2018. T. Desloges.
Images courtesy Thomas Desloges.



Belenois zochalia agrippinides. Female A. Left – upperside; right – underside.
Wingspan: 48mm. Kenya, Nairobi, Ngong Forest. 1750 m. 28.X.1988. M.A. Newport.
(Newport Collection).



Belenois zochalia agrippinides. Female B. Left – upperside; right – underside.
Wingspan: 48mm. Karura Forest, Nairobi, Kenya. 5400 ft. 1-2-79. M.A. Newport.
(Newport Collection).

Type locality: “East Africa”.

Distribution: Democratic Republic of Congo (Ituri, Kivu), Uganda, Kenya, Tanzania, Malawi, Zambia.

Specific localities:

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

Kenya – Gopo lal Mavari, Laitsipia (Butler, 1898); Guaso Laschau (Butler, 1898); steppes N.W. of Longari (Butler, 1898); Thagana in woods beside Ukikuya (Butler, 1898); Thegu (Butler, 1898); Ndoro, steppes at base of Kenya (Butler, 1898); Kithungulu (Butler, 1898); Konu (Butler, 1898); Ukikuya (Butler, 1898); Tana river basin (Butler, 1898); Elgon (Aurivillius, 1925); Mumias (Talbot, 1943); Soy (Stoneham, 1957); Ngong Forest, Nairobi (female A illustrated above); Karura Forest, Nairobi (female B illustrated above).

Tanzania – Almost throughout the country (Kielland, 1990d); Mubuku Valley, E. Ruwenzori (Heron, 1909); Katavi National Park (Fitzherbert *et al.*, 2006).

Malawi – Nyika N.P. (J. Timberlake, pers. comm., 2019).

Zambia – Mbala (Heath *et al.*, 2002; male illustrated above); below Nyika Escarpment (Heath *et al.*, 2002).

formosa Butler, 1898 (as sp. of *Belenois*). *Transactions of the Entomological Society of London* **1898**: 434 (431-438). Kenya: “Gopo lal Mavari, Laitsipia; Guaso Laschau; steppes N.W. of Longari; Thagana in woods beside Ukikuya; Thegu; Ndoro, steppes at base of Kenya, 7000 feet; on shrub-covered plateau at Kithungulu, Konu, Ukikuya, Tana river basin”.

ochracea Heron, 1909 (as var. of *Belenois zochalia*). *Transactions of the Zoological Society of London* **19**: 168 (141-178). Uganda: “Mubuku Valley, E. Ruwenzori, 6000-13000 ft”.

bryki Aurivillius, 1925 (as ab. of *Pieris zochalia*). *Entomologisk Tidskrift* **46**: 207 (206-212). Kenya: “Elgon”. Holotype in the Swedish Natural History Museum (images available at www2.nrm.se/en/lep_nrm/z).

latilimbalis Talbot, 1943 (as female f. of *Belenois zochalia agrippinides*). *Annals and Magazine of Natural History* (11) **10**: 309 (305-336). Kenya: “Mumias, 4200 feet”.

veronica Stoneham, 1957 (as female f. of *Belenois zochalia*). *Bulletin of the Stoneham Museum* (68): [4] ([4 pp.]). Kenya: “Soy”.

Belenois zochalia connexiva (Joicey & Talbot, 1927) Western Forest Caper White

Pieris crawshayi connexiva Joicey & Talbot, 1927. *Encyclopédie Entomologique* (B.3. Lepidoptera) **2**: 9 (1-14).

Type locality: Cameroon: “Cameroons, south of Bamenda, 5000 ft”.

Distribution: Nigeria (highlands), Cameroon (highlands).

Specific localities:

Nigeria – Obudu Plateau (Larsen, 2005a); Mambilla Plateau (Larsen, 2005a)

Cameroon – south of Bamenda (TL); Bafut Ugamba Forest, Bamenda (Bernardi, 1966); Rumpi Hills (Larsen, 2005a).

camerunica Bernardi, 1966 (as ssp. of *Belenois zochalia*). *Bulletin de la Société Entomologique de France* **71**: 227 (226-228). Cameroon: “Forêt de Bafut Ugamba, Bamenda”.

Belenois zochalia galla (Ungemach, 1932) Ethiopia Forest Caper White

Pieris zochalia galla Ungemach, 1932. *Mémoires de la Société des Sciences Naturelles (et Physiques) du Maroc* **32**: 32 (1-122).

Type locality: Ethiopia: “Nole-Kaba”.

Distribution: Ethiopia.

Specific localities:

Ethiopia – Nole-Kaba (TL); Oullaga (Ungemach, 1932).

depunctata Ungemach, 1932 (as ssp. of *Pieris zochalia*). *Mémoires de la Société des Sciences Naturelles (et Physiques) du Maroc* **32**: 32 (1-122). Ethiopia: “Oullaga”.