

Genus *Cassionympha* van Son, 1955 Dull Browns

Transvaal Museum Memoirs No. 8: 96 (1-166).

Type-species: *Satyrus cassius* Godart, by original designation.

The genus *Cassionympha* belongs to the Family Nymphalidae Rafinesque, 1815; Subfamily Satyrinae Boisduval, 1833; Tribe Satyrini Boisduval, 1833; Subtribe Ypthimina, Reuter, 1896. The other genera in the Subtribe Ypthimina in the Afrotropical Region are *Ypthima*, *Ypthimomorpha*, *Mashuna*, *Mashunoides*, *Strabena*, *Neocoenyra*, *Coenyropsis*, *Coenyra*, *Physcaeneura*, *Neita*, *Melampus*, *Pseudonympha*, *Paternympha* and *Stygionympha*.

Cassionympha (**Dull Browns**) is an Afrotropical genus containing four species. Restricted to South Africa and Swaziland.

**Cassionympha camdeboo* (Dickson, [1981])# Camdeboo Dull Brown

Pseudonympha camdeboo Dickson, [1981] *in* Dickson, [1981-2]. *Entomologist's Record and Journal of Variation* **93**: 219 (**93**: 219-221; **94**: 32-35, 41-44).

Pseudonympha camdeboo Dickson, 1982. Pringle *et al.*, 1994: 66. [date of authorship erroneous]

Cassionympha camdeboo (Dickson, 1981). Henning & Henning, 1997: 137 **comb. nov.**



Cassionympha camdeboo. Male (Wingspan 35 mm). Left – upperside; right – underside.
Aberdeen, Eastern Cape Province, South Africa. 12 November 1981. V. Pringle.
Images M.C.Williams ex Henning Collection.

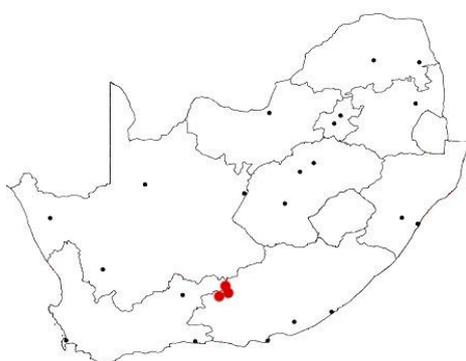


Cassionympha camdeboo. Female. Left – upperside; right – underside.
Aberdeen, Eastern Cape Province, South Africa. 6 November 1984. V.L. Pringle.
Images M.C. Williams ex Pringle Collection.

Alternative common name: Kamdeboo Bosbruintjie (Afrikaans).

Type locality: South Africa: “Eastern Cape Province: Aberdeen”.

Diagnosis: Differs from *Cassionympha detecta* in the following respects: the fulvous red colouring on the forewing upperside is unbroken and lacks any intrusion of the dark-brown ground-colour in the vicinity of the end of the cell; the short, dark streak basad of the golden-yellow ring of the ocellus of the forewing upperside, which is outwardly concave and not straight as in *detecta*; the hindwing underside is plain, without the tiny ocellate spots and median stripe normally seen in *detecta* (Pringle *et al.*, 1994).



Distribution: South Africa –
Eastern Cape Province.

Distribution: South Africa (Eastern Cape Province).

Specific localities:

Eastern Cape Province – Camdeboo Mountains, north of Aberdeen (TL; Wykeham).

Habitat: Nama Karoo (Woodhall, 2005). Comparatively moist woodland and scrub at high altitude (Mecenero *et al.*, 2013). Vegetation Type: NKu 2 – Upper Karoo Hardeveld (Mecenero *et al.*, 2013).

Habits: Flies quite rapidly, usually in open ground on the edges of thick bush (Pringle *et al.*, 1994).

Flight period: November and December (Pringle *et al.*, 1994).

Early stages: Nothing published.

Larval food: Nothing published.

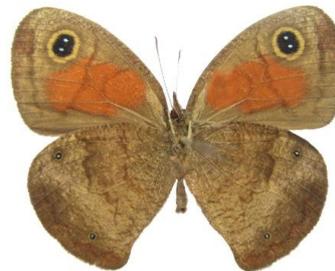
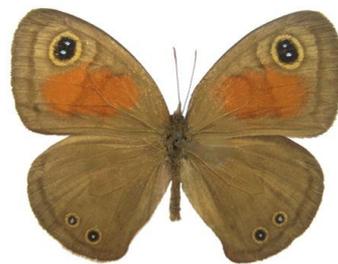
Conservation status: Classified as ‘Rare (Restricted Range)’ by Mecenero *et al.*, 2013.

****Cassionympha cassius* (Godart, [1824])#**
Rainforest Dull Brown



Rainforest Dull Brown (*Cassionympha cassius*).
Images courtesy Steve Woodhall.

- Satyrus cassius* Godart, [1824] *in* Latreille & Godart, [1819], [1824]. *Encyclopédie Méthodique. Histoire Naturelle [Zoologie]* 9
Entomologie: 526 (1-328 [1819], 329-828 [1824]). Paris.
- Erebia cassius* Godart. Trimen, 1866a.
- Pseudonympha cassius* (Godart, 1819). Trimen & Bowker, 1887a.
- Melampias cassius* Godart. Swanepoel, 1953a.
- Cassionympha cassius* (Godart, 1824). Van Son, 1955: 96.
- Cassionympha cassius* (Godart, 1823). Dickson & Kroon, 1978.
- Cassionympha cassius* (Godart, 1824). Pringle *et al.*, 1994: 61.



Cassionympha cassius. Male (Wingspan 37 mm). Left – upperside; right – underside.
Blyde Canyon N.R., Mapumalanga, South Africa. 24 April 1999. M. Williams.
Images M.C. Williams ex Williams Collection.

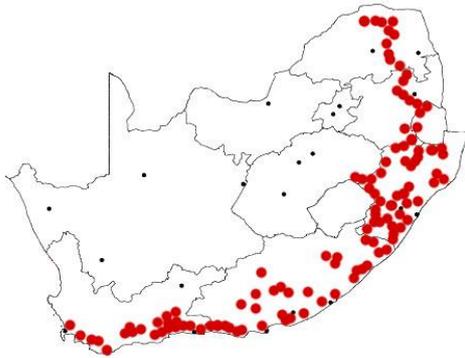


Cassionympha cassius. Female (Wingspan 40 mm). Left – upperside; right – underside.
Lekgalameetse N.R., Limpopo Province, South Africa. 3 September 2002. M. Williams.
Images M.C. Williams ex Williams Collection.

Alternative common names: Reënwood-bosbruintjie (Afrikaans).

Type locality: No locality given. Pringle (2013) could not locate Godart's type specimen and therefore designated a neotype (male): "Cape Town, Western Cape, 6 November 1954, L. Vári". The neotype is housed in the Ditsong National Museum of Natural History, Pretoria.

Diagnosis: The number of ocelli on each wing is variable (Pringle *et al.*, 1994).



Distribution:

South Africa – Limpopo Province, Mpumalanga, Free State Province, KwaZulu-Natal, Eastern Cape Province, Western Cape Province.

Swaziland (Duke *et al.*, 1999).

Distribution: South Africa (Limpopo Province, Mpumalanga, Free State Province, KwaZulu-Natal, Eastern Cape Province, Western Cape Province), Swaziland (Duke *et al.*, 1999).

Specific localities:

Limpopo Province – Lekgalameetse Nature Reserve ("Malta Forest") (Swanepoel, 1953); Woodbush (Swanepoel, 1953); Duiwelskloof (Swanepoel, 1953); Sibasa (Swanepoel, 1953); Entabeni Forest (Swanepoel, 1953); Louis Trichardt (Swanepoel, 1953); Buzzard Mountain Retreat [-23.012 29.765] (Williams, unpub., 2015).

Mpumalanga – Barberton (Swanepoel, 1953); Sabie (Swanepoel, 1953); Graskop (Swanepoel, 1953); Marieps Kop (Swanepoel, 1953); Sterkspruit Nature Reserve (Williams; male illustrated above); Buffelskloof Nature Reserve (Williams).

Free State Province – Golden Gate Highlands National Park (Williams); Platberg, Harrismith (Dobson, Williams & Schutte, unpublished, 2010).

KwaZulu-Natal – Kokstad (Swanepoel, 1953); Margate (Swanepoel, 1953); Umkomaas (Swanepoel, 1953); Durban (Swanepoel, 1953); Pietermaritzburg (Swanepoel, 1953); Balgowan (Swanepoel, 1953); Karkloof (Swanepoel, 1953); Eshowe (Swanepoel, 1953); St Lucia Bay (Swanepoel, 1953).

Eastern Cape Province – Uitenhage (Swanepoel, 1953); Grahamstown (Swanepoel, 1953); Katberg (Swanepoel, 1953); King William's Town (Swanepoel, 1953); Stutterheim (Swanepoel, 1953); Butterworth (Swanepoel, 1953); Tsomo River (Swanepoel, 1953); Cala (Swanepoel, 1953); Bashee River (Swanepoel, 1953); Port St Johns (Swanepoel, 1953).

Western Cape Province – Cape Town (Swanepoel, 1953); Paarl (Swanepoel, 1953); Worcester (Swanepoel, 1953); Swellendam (Swanepoel, 1953); Knysna (Swanepoel, 1953); Oudtshoorn (Swanepoel, 1953).

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

Habitat: Forest and riverine bush.

Habits: Flies close to the ground, with a bobbing flight pattern, in shady places in forest and bush (Pringle *et al.*, 1994).

Flight period: All year.

Early stages:

Clark, *in* Van Son, 1955: 97.

"Egg. The eggs are laid singly on grass. They are pale yellow when laid, 1 mm in diameter and 1.05 mm high, and have some thirty-five indistinct and interrupted keels which go halfway up the side of the egg, then break into a hexagonal network pattern to the top. The colour of the egg gradually darkens and after three days light brown

bands and blots appear; these gradually darken. **Larva: First instar.** The young larva eats its way out near the top and partially devours the shell. It is 2 mm long, dull yellowish when hatched, with red stripes. It gradually turns pale green, with greenish-brown stripes. The larva feeds on edge of blade and develops more in length than in breadth. **Second instar.** After the first moult the larva is 5½ mm long, green with dark green-and-white stripes, and a yellow-green head. The body is covered with black setae mounted on small white moles; subspiracular line white touched with yellow, forked tail tipped with pink. **Third instar.** After the second moult the larva is 9 mm long, and much the same as in the second instar except for the larger number of smaller setae. The white subspiracular white line is edged below with pink and above by dark green. Some larvae have a distinct pinkish tinge intermingled with the green of the body. **Final instar.** After the third moult the larvae generally have a reddish colour, but some are green as before. The head has sometimes very reduced moles. They are 15 mm long, and feed on the edge of a blade of grass or rest on stalk. When ready to pupate they are 23 mm long and turn a dull pale green touched with red, or plain green. Having chosen a suitable place, the larva spins a silk mat and, fastening its anal claspers in this, it hangs down, then doubles up in a complete circle, with the head nearly against the anal claspers; it remains suspended till pupation. The larval stage lasts some forty days, each instar taking about ten days. **Pupa.** The pupa is suspended by cremastral hooks only, and hangs downward. It is green with black facings, or plain green, and does not vary in size. Before emergence, the pupa turns black. The pupal stage lasts thirteen days.”

Larval food:

Juncus capensis Thunb. (Juncaceae) [Dickson & Kroon, 1978: 42].

Pentaschistis capensis (Nees) Stapf (Poaceae) [Dickson & Kroon, 1978: 42; as *Afrachneria capensis*].

hyperbioides Wallengren, 1857 (as sp. of *Pseudonympha*). *Öfversigt af Kongl. Vetenskaps-Akademiens Förhandlingar. Stockholm annis 1838-1845. Collecta (n.s.)* 2 (4): 32 (55 pp.) South Africa: “Caffraria”.

****Cassionympha detecta* (Trimen, 1914)#**
Cape Dull Brown

Pseudonympha detecta Trimén, 1914. *Entomologist's Monthly Magazine* 50: 281 (281-282).

Melampias detecta Trimén. Swanepoel, 1953a.

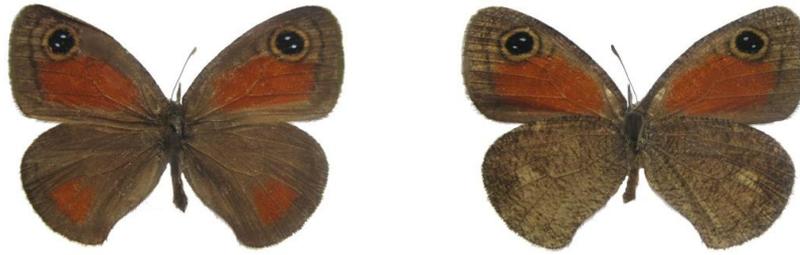
Pseudonympha detecta Trimén, 1914. Dickson & Kroon, 1978.

Pseudonympha detecta Trimén, 1914. Pringle *et al.*, 1994: 66.

Cassionympha detecta (Trimén, 1914). Henning & Henning, 1997: 137 **comb. nov.**



Cassionympha detecta. Male (Wingspan 35 mm). Left – upperside; right – underside.
Still Bay, Western Cape Province, South Africa. 15 December 2005. J. Dobson.
Images M.C.Williams ex J. Dobson Collection.

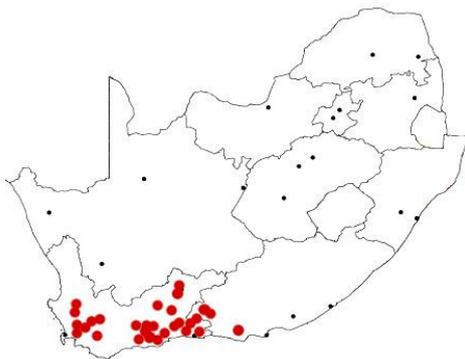


Cassionympha detecta. Female (Wingspan 36 mm). Left – upperside; right – underside.
Kammanassie Mountain, Western Cape Province, South Africa. 14 December 2007. J. Dobson.
Images M.C.Williams ex J. Dobson Collection.

Alternative common name: Kaapse Bosbruintjie (Afrikaans).

Type locality: [South Africa]: “Bain’s Kloof, the mountain road between Wellington and Worcester in the south-western district of Cape Colony”.

Diagnosis: Unlike *Cassionympha cassius*, which has two ocelli on the hindwing upperside, there is an orange-red patch. In most specimens this patch contains two minute ocelli (Pringle *et al.*, 1994).



Distribution: South Africa – Eastern Cape Province – south-west, Western Cape Province.

Distribution: South Africa (Eastern Cape Province – south-west, Western Cape Province).

Specific localities:

Eastern Cape Province – Cockscomb Mountain, near Uitenhage (Pringle *et al.*, 1994).

Western Cape Province – Bain’s Kloof (TL); Klappmuts (Swanepoel, 1953); Stellenbosch (Swanepoel, 1953); Steenbras (Swanepoel, 1953); Franschoek (Swanepoel, 1953); Paarl (Swanepoel, 1953); Ceres (Swanepoel, 1953); Worcester (Swanepoel, 1953); Malgas (Swanepoel, 1953); Caledon district (Swanepoel, 1953); Mossel Bay (Swanepoel, 1953); Still Bay (Swanepoel, 1953); Pakhuis Pass, in the Cedarberg (Pennington); Swartberg Pass (Pennington); Nuweveld Mountains, near Beaufort West (Pringles); Betty’s Bay (Mecenero *et al.*, 2013); Citrusdal (Mecenero *et al.*, 2013).

Habitat: From sea-level to considerable altitudes, usually in patches of scrub or bush (Pringle *et al.*, 1994).

Habits: Closely resembles *Cassionympha cassius* in flight but flies faster and more purposefully (Pringle *et al.*, 1994).

Flight period: September to April (Pringle *et al.*, 1994).

Early stages:

Clark, in Van Son, 1955: 134. [as *Pseudonympha detecta*]

“**Egg.** Eggs are laid singly on blades of grass or on the stalks. They are very pale watery green when laid, but turn a deeper green with time, and a broad red band develops just below the micropyle. On one side the red stretches downward and passes through a gap in a thinner red line about two-thirds down the side. Just before hatching the eggs are a dull yellow. There are 40-45 longitudinal ribs on the middle third, cross-braced by about

twelve indentations between the ribs. Above and below, the pattern breaks up into more or less irregular indentations. The eggs are fairly constant in size, being 1.1 mm high; the cross section is elliptical, the major diameter being 0.95 mm and the minor 0.8 mm. The egg-stage is twelve days. **Larva: First instar.** The young larva eats its way out near the top and after a short rest eats the discarded shell. It is 3 mm long and of a pale dullish yellow with reddish dorsal, subdorsal, lateral and spiracular lines, while the under side of the ridge is touched with the same colour. The head is pale dull yellow with grey markings and whitish setae. The spiracular line gradually broadens to envelop the spiracles, and the lateral line splits, while the general ground-colour becomes green. The body setae are black with a rounded white tip, giving the appearance of a white-capped club. These are set on yellowish-white moles. The spines on the final segment depart from the general rule and are a dull watery yellow. The larvae rest generally at the junction of the blades of grass head downward. They feed on the edge of the blade, sometimes tackling the end of a young shoot. Before moulting, they spin a silken mat into which they fasten their claspers. The discarded skin is not eaten. **Second instar.** The larva is green with darker green dorsal, subdorsal, two thin lateral and a broad spiracular line. The ridge at first is a light green, but later assumes a whitish colour. The head is the same as the general ground-colour. The head is the same as the general ground-colour. In another form the spiracular line is brick-red, in which case the head is reddish-salmon. There are many intermediate forms. The body is now covered with flat spoon-shaped setae on rounded moles, arranged in five rough rows from the dorsal line to the spiracle, with one seta per wrinkle, except the thicker wrinkles where there are two. On the lateral ridge there are two rows of setae. On the ventral portion there are single setae on major wrinkles, and on the prolegs there is a half-moon of five. These are pointed setae. **Third instar.** As in the previous instar, there is a marked variation in colour. Some larvae have a dull-yellow ground-colour with a darker shade of yellow; dorsal line edged with white. The subdorsal line is edged below with white and the lateral line is composed of two thin dark yellow lines. The broad spiracular line is reddish and is punctuated below by a white lateral ridge touched below with pale dull yellow. The ventral portion is pale dull yellow with a touch of green. The setae are dull brown and are more plentiful, those on the white portions are on white moles, those on the yellow portion are on moles of the same colour, and those on the red have red moles. The head is salmon-red. In the other extreme, the larva is pale green with lines of a darker shade, the lateral line is white, and the spiracular line, which reaches down to the white ridge, is a deeper green. An intermediate form is pale green with dorsal, subdorsal and twin lateral lines of green edged with white as in the former case, but the white is not so intense. The spiracular line is purple-red and the lateral ridge whitish-salmon. The head is the same shade of green as the general ground-colour. The larvae in this instar start feeding on the tips of the blades and eat downward. **Fourth instar.** There are two extremes, mainly green and pinkish-brown. The green varieties have a whitish ground-colour with pale and dark green stripes, but as the larva grows, the underside of the lateral ridge becomes touched with yellow, and in some the white stripes assume a yellowish tint. The head is green and the fork of the final segment is pink. The pinkish-brown variety has a yellow or white ground-colour with brown lines, and with light pinkish-brown intermediate lines. The dorsal and lateral stripes are sometimes intensified in colour posteriorly on the middle segments. The ventral portion is pale pinkish-brown. The head is pale pinkish-brown with a touch of green. Anal fork inclined to pink. When fully fed and ready to pupate the larva gradually shrinks in size and the markings fade. The larva in the green type assumes a very pale watery green and the brown variety turns a pale brownish-pink. It finds a suitable place, spins a mat into which it fastens its anal claspers, then doubles up and hangs downward until pupation. The duration of the various instars varies considerably with individual larvae of the same brood, and winter broods are of longer duration than the summer broods. It is consequently difficult to fix the duration of individual instars. Eliminating very much retarded larvae, most of which died in one or other of the instars, the following times were noted for the winter brood: egg 12 days; first larval instar, 15-24 days; second larval instar, 19-23 days; third larval instar, 22-37 days; fourth larval instar, 26-52 days; pupa, 17-29 days. The size of the larvae in the various instars is as follows: first 3-5.75 mm; in the second it increases in size to 9.5 or as much as 10.5 mm; in the third to between 13.5 and 14.5 mm; and in the final instar from 23-24 mm. There would appear to be at least two broods a year. Eggs laid in March hatch and the larvae progress slowly through the winter months. The first imago emerges in September, but owing to the variable development in the larval instars, maturity is reached throughout October and early November. Meanwhile eggs from females that emerged earlier have hatched, and the larvae have developed far more rapidly and produced mature insects to emerge in December and January; broods from later butterflies appear until March, and have been captured up to the end of April. **Pupa.** The pupa is suspended head downward by cremastral hooks. The green larvae produce plain green pupae and the brown an almost black pupa. The peculiar thing, however, is that the green pupa has a smooth surface, while the black pupa has seven moles on each side of the abdomen, decreasing in size toward the cremaster and rendered conspicuous by white patches. The body is heavily spotted with white and the wing cases are whitish, black spots marking the end of the veins, and there is a small black patch at the end of the cell. On the centre of the thorax there is a white spot supported on either side by a smaller white spot. Pupae are 11-12 mm long. The pupal stage lasts 17-26 days."

Larval food:

Ficinia elongata Boeckeler (Cyperaceae) [Van Son, 1955: 135].

Ficinia ramosissima Kunth (Cyperaceae) [Dickson, *in* Van Son, 1955: 135].
Ischyrolepis species (syn. *Restio*), probably *Ischyrolepis tenuissima* (Kunth) H.P. Linder (Restionaceae)
[Dickson, *in* Van Son, 1955: 135].
(Probably) *Ficinia acuminata* (Nees) Nees (Cyperaceae) [Dickson, *in* Pringle *et al.*, 1994: 66].
Restio species (Restionaceae) [Kroon, 1999].

****Cassionympha perissinottoi* Pringle, 2013#**
Southern Rainforest Dull Brown

Cassionympha perissinottoi Pringle, 2013. *Metamorphosis* 24: 39 (38-43).



Cassionympha perissinottoi. Male. Left – upperside; right – underside.
Agulhas-Rhenosterkop, Western Cape Province, South Africa. 15 September 2014. A. Morton.
Images A. Morton ex Morton Collection.

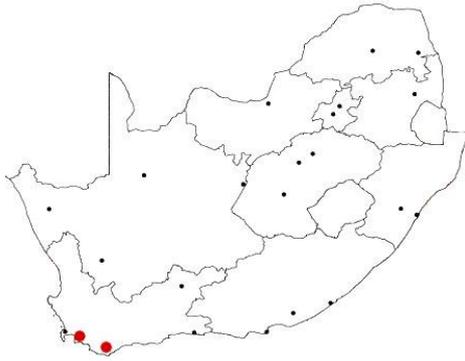


Cassionympha perissinottoi. Female. Left – upperside; right – underside.
Agulhas-Rhenosterkop, Western Cape Province, South Africa. 15 September 2014. A. Morton.
Images A. Morton ex Morton Collection.

Type locality: South Africa: “Cape Agulhas, Western Cape, 9 October 2007, E.L. Pringle”. Holotype (male) and Allotype (female) in the Ditsong National Museum of Natural History, Pretoria, South Africa.

Diagnosis: Differs from *Cassionympha cassius* in the following respects: outer margins of both wings less rounded; ground colour darker; red patch on forewing upperside a deeper shade of red and generally more restricted in extent; hindwing underside plainer and lacking the median and subbasal bands of *cassius*; hindwing ocellate spots generally larger and more conspicuous; generally a slightly smaller species than *cassius* (Pringle, 2013). For diagnostic features of the genitalia see Pringle, 2013: 40.

Etymology: Named for Dr Renzo Perissinotto.



Distribution: South Africa –
Western Cape Province.

Distribution: South Africa (Western Cape Province).

Specific localities:

Western Cape Province – Cape Agulhas National Park (TL); Pringle Bay (H.C. Ficq, *vide* Pringle, 2013: 40).

Habitat: Fynbos.

Habits: Flies with a rapid, bobbing flight in open areas around dense scrub, or in the shade of taller trees (Pringle, 2013).

Flight period: September, October, March, April (Pringle, 2013).

Early stages: Nothing published.

Larval food: Nothing published.