

Genus *Cooksonia* Druce, 1905 Tiger Mimics

Transactions of the Entomological Society of London **1905**: 256 (251-262).

Type-species: *Cooksonia trimeni* Druce, 1905, by monotypy.

= *Sheffieldia* Druce, 1912. *Entomologist's Monthly Magazine* **48**: 128 (128-133). Type-species: *Sheffieldia neavei* Druce, 1905, by original designation.

Cooksonia (**Tiger Mimics**) is a purely Afrotropical genus containing seven species. They are very large for lycaenids and are excellent mimics of certain day-flying moths and acraeines. Bampton (1995) states that the larvae feed on foliose lichens. Gardiner, cited by Edge (2018) notes that colonies of species in the genus *Cooksonia* are often localised, even though the species may have wider distributions, and their often sedentary habits make them difficult to locate. In addition, when they are flying their superficial appearance to *Acraea* and day flying moths may decrease their detectability as they may be mistaken for members of these groups.

**Cooksonia abri* Collins & Larsen, 2008 White-spotted Tiger Mimic

Cooksonia abri Collins & Larsen, 2008. *Metamorphosis* **19** (2): 49 (42-113).

Cooksonia abri Collins & Larsen, 2008. d'Abreu, 2009: 626.



Cooksonia abri. Male. Left – upperside; right – underside.

Images courtesy Colin Congdon ex African Butterfly Research Institute Collection.



Cooksonia abri. Female. Left – upperside; right – underside.

Images courtesy Colin Congdon ex African Butterfly Research Institute Collection.

Type locality: Cameroon: “Northern Cameroun, Waak [Wak] (07°70'N 13°55'E), v.2007 (ABRI leg. et coll.)”. Holotype (male) in African Butterfly Research Institute, Nairobi. Paratypes: 25 males and 23 females, same data as holotype but with different dates (2004 to 2007 but mostly 2007).

Original Description:

“Male forewing 25 mm. The ground-colour is orange-brown, with a black costa, subapical patch, and margin. The apex has white spots in spaces 5-7. The cell has a black basal streak, a black spot in its centre, and another at the end of the cell. All veins are blackened and there are two small black spots in space 1b towards the base. The hindwing is orange-brown with a broad black margin (3 mm at its widest). There is a black spot in the cell and another at its end, as well as two basal spots. The underside has a more complex pattern. The forewing has a marginal band of creamy rectangular spots finely bordered with black on the margin, the veins, and at the inner edges; the spots gradually increase in width towards the apex. Spaces

Distribution: Cameroon (north).

Recorded, in error, from Angola by d’Abrera (2009).

Specific localities:

Cameroon – Wak (TL). Known only from the type locality.

Habitat: Nothing published.

Early stages: Nothing published.

Larval food: Nothing published.

****Cooksonia aliciae* Talbot, 1935**
Nyasa Tiger Mimic

Cooksonia aliciae Talbot, 1935. *Entomologist’s Monthly Magazine* 71: 203 (202-209).

Cooksonia aliciae Talbot, 1935. d’Abrera, 2009: 626.



Cooksonia aliciae. Male. Left – upperside; right – underside.
Chowe Village, near Mangochi, Malawi. 23 November 2000.
Images M.C. Williams ex Gardiner Collection.



Cooksonia aliciae. Female. Left – upperside; right – underside.
Chowe Village, near Mangochi, Malawi. 7 December 2003.
Images M.C. Williams ex Gardiner Collection.

Type locality: [Malawi]: “Nyasaland: Maiwale, 12 miles east of Fort Johnston, 3280 feet”.

Distribution: Malawi.

Specific localities:

Malawi – Maiwale [= Mangochi] (TL). Known only from the type locality.

Early stages: Nothing published.

Larval food: Nothing published.

****Cooksonia gardineri* Edge, 2018**
Banded Tiger Mimic

Cooksonia gardineri Edge, 2018. *Metamorphosis* 29: 52 (51-55).



Cooksonia gardineri. Male. Left – upperside; right – underside.
Mongu, Zambia. 16 November 2017. A. Gardiner.
Images M. Williams ex Gardiner Collection.



Cooksonia gardineri. Male. Left – upperside; right – underside.
Mongu, Zambia. 16 November 2017. A. Gardiner.
Images M. Williams ex Gardiner Collection.



Cooksonia gardineri. Male. Left – upperside; right – underside.
Mongu, Zambia. 16 November 2017. A. Gardiner.
Images M. Williams ex Gardiner Collection.



Cooksonia gardineri. Female. Left – upperside; right – underside.
Mongu, Zambia. 16 November 2017. A. Gardiner.
Images M. Williams ex Gardiner Collection.

Type locality: Zambia: “Near Mongu, Western Province, Zambia, 15°20'36"N, 23°18'02"E, 1050m; 16.xi.2017; A. Gardiner leg.; NHM Prep. genit.” Holotype (male) in the Natural History Museum, London.

Etymology: The species name recognises the collecting efforts of the Gardiner family, particularly the late Mike Gardiner and his son Alan (Edge, 2018).

Distribution: Zambia.

Specific localities:

Zambia – Near Mongu (TL). Known only from the type locality (Edge, 2018).

Habitat: Short Miombo woodland on deep Kalahari sands (Edge, 2018).

Habits: Appears to fly lower down than other species in the genus, often alighting on grass stems less than a metre above the ground. It does not appear to perch more than three metres above ground level (Edge, 2018). Males are active from 09h00, and defend territories, opening and closing their wings while resting (Edge, 2018).

Early stages: Nothing published.

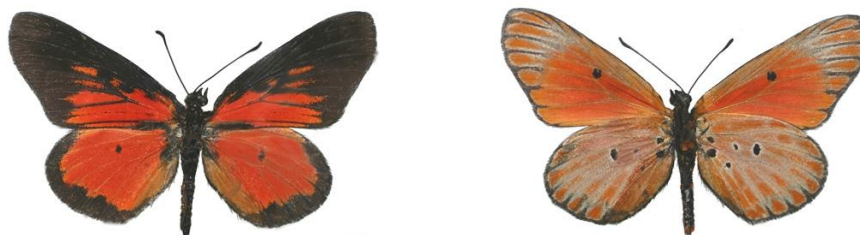
Larval food: Nothing published.

**Cooksonia ginettae* Collins & Larsen, 2008

Plain Tiger Mimic

Cooksonia ginettae Collins & Larsen, 2008. *Metamorphosis* 19 (2): 51 (42-113).

Cooksonia ginettae Collins & Larsen, 2008. d'Abreu, 2009: 626.



Cooksonia ginettae. Male. Left – upperside; right – underside.
Images courtesy Colin Congdon ex African Butterfly Research Institute Collection.



Cooksonia ginettae. Female. Left – upperside; right – underside.
Images courtesy Colin Congdon ex African Butterfly Research Institute Collection.

Type locality: Democratic Republic of Congo: “East Kivu, Mitumba Mountains, Kasuo, 1,800 m (00 14'S 29 01'E), 14.iv.2007 (R. Ducarme leg., coll. Musée Royal de l'Afrique Centrale (MRAC), Tervuren).”

Etymology: Named for Ginette Ducarme, wife of Robert Ducarme.

Distribution: Democratic Republic of Congo (east Kivu).

Specific localities:

Democratic Republic of Congo – Kasuo, Mitumba Mountains, East Kivu (TL); Kithikolo-Lubero area (Collins & Larsen, 2008); Lume (Collins & Larsen, 2008); Kasungo (Collins & Larsen, 2008); Semuliki Valley (Ducarme, 2018).

Habitat: Nothing published.

Flight period: There is a single annual brood in the dry season (Collins & Larsen, 2008).

Early stages: Nothing published.

Larval food: Nothing published.

****Cooksonia neavei* (Druce, 1912)**
Yellow-banded Tiger Mimic

Sheffieldia neavei Druce, 1912. *Entomologist's Monthly Magazine* 48: 128 (128-133).

Cooksonia neavei (H.H. Druce, 1912). Pringle *et al.*, 1994: 134.

Cooksonia neavei Druce, 1912. d'Abrera, 2009: 626.



Cooksonia neavei neavei. Male. Left – upperside; right – underside.
Images courtesy Colin Congdon ex African Butterfly Research Institute Collection.



Cooksonia neavei rhodesiae. Female. Left – upperside; right – underside.
Christon Bank, Zimbabwe. 6 November 1999.
Images M.C. Williams ex Gardiner Collection.

Type locality: [Tanzania]: “German East Africa, Uhehe District, 3000-3500 ft”.

Distribution: Tanzania, Zambia, Zimbabwe.

Habitat: *Brachystegia* woodland (Pringle *et al.*, 1994). Woodland (Heath *et al.*, 2002).

Habits: The species is sedentary, spending most of the day hanging with closed wings from twigs or perched on the trunks of trees. They are well camouflaged, resembling dead leaves. When disturbed they will usually flutter to a new perch but if attacked they fly away rapidly, disappearing amongst the trees (Pringle *et al.*, 1994). Specimens fly after 15h00 on sunny days or for more extended periods on cloudy days (Bampton, *vide* Heath *et al.*, 2002). Females only oviposit in the late afternoon (Congdon & Collins, 1998).

Flight period: Late October to mid-November (Pringle *et al.*, 1994). In Tanzania only recorded in November (Congdon & Collins, 1998).

Early stages:

Cottrell, *in* Dickson & Kroon, 1978: 83, fig. 241 vii, p.599 [locality not specified].

“I have studied the habits and reared the species through from egg to adult as well as from live larvae: it does feed on a foliose lichen (probably of the genus *Parmelia*).”

Pringle *et al.*, 1994: 134.

“Females have been seen fluttering around tree trunks and laying eggs on tree lichens. The species has been bred from material obtained by Cottrell and others.”

Bampton, *in* Congdon & Collins, 1998: 60.

Larval food:

(probably) *Parmelia* species (Lichenes), on tree trunks [Cottrell, *in* Dickson & Kroon, 1978: 83; locality not specified].

Cooksonia neavei neavei (Druce, 1912) Yellow-banded Tiger Mimic

Sheffiedia neavei Druce, 1912. *Entomologist's Monthly Magazine* 48: 128 (128-133).

Cooksonia neavei neavei Druce, 1912. d'Abbrera, 2009: 626.



Cooksonia neavei neavei. Male. Left – upperside; right – underside.
Images courtesy Colin Congdon ex African Butterfly Research Institute Collection.

Type locality: [Tanzania]: German East Africa, Uhehe District, 3000-3500 ft’.

Distribution: Tanzania (south).

Specific localities:

Tanzania – Uhehe District (TL); Madibira near Mufindi (Congdon, *vide* Kielland, 1990d); Chimala escarpment on eastern flank Kitulo Plateau at 1 200 to 1 800 m (Congdon & Collins, 1998).

Cooksonia neavei rhodesiae Pinhey, 1962 Southern Yellow-banded Tiger Mimic

Cooksonia neavei rhodesiae Pinhey, 1962. *Occasional Papers of the National Museum of Southern Rhodesia* 3: 886 (871-

891).

Cooksonia neavei rhodesiae Pinhey, 1962. Dickson & Kroon, 1978.

Cooksonia neavei rhodesiae Pinhey, 1962. Pringle *et al.*, 1994: 134.

Cooksonia neavei rhodesiae Pinhey, 1962. d'Abrera, 2009: 626.



Cooksonia neavei rhodesiae. Male. Left – upperside; right – underside.
Christon Bank, Zimbabwe. 6 November 1999.
Images M.C. Williams ex Gardiner Collection.



Cooksonia neavei rhodesiae. Female. Left – upperside; right – underside.
Christon Bank, Zimbabwe. 6 November 1999.
Images M.C. Williams ex Gardiner Collection.

Type locality: [Zimbabwe]: “south of Marandellas in Southern Rhodesia”.

Distribution: Zambia, Zimbabwe (north-east).

Specific localities:

Zambia – Lusaka (Heath *et al.*, 2002); Copperbelt (Heath *et al.*, 2002); north-east (Heath *et al.*, 2002); Mufulira (male and female illustrated above).

Zimbabwe – south of Marondera (TL; Bomford); Bazeley Bridge, 48 km south of Mutare (H. Cookson); near Harare (Cottrell and Duke); Christon Bank (Cottrell and Duke).

****Cooksonia nozolinoi* Mendes & Bivar de Sousa, 2007**
Huambo Tiger Mimic

Cooksonia nozolinoi Mendes & Bivar de Sousa, 2007. *Shilap Revista de Lepidopterologia* **35** (138): 266 (265-268).

Type locality: Angola: “Huambo Province: Nova Lisboa [= Huambo], 12/9/1975, (NA, no number) (CZ-5265)”. Holotype (female) in the Instituto de Investigação Científico Tropical entomological collection (CZ), Lisbon, Portugal. Known only from a single female found in the collection of the late Armando Nozolino de Azevedo, taken at Huambo (12° 46' S, 15° 44' E; 1650 m).

Diagnosis: Closest to *Cooksonia neavei* but differs from it in that the dark dot of the forewing (dorsal and ventral cell apex) is completely isolated from the costal area, the hindwing marginal area is narrower and shows small white punctuations, and the hindwing irregular blackish spots of the underside are less numerous and less extended (Mendes & Bivar de Sousa, 2007).

Description:

“Forewing length: 26.8 mm; wingspan: 59 mm. Wings dorsally orange-yellow, the marginal areas and the discal dot blackish brown, the ventral surface more ochreous; subapical (forewing) and submarginal (hind-

wing) ventral markings greyish-ochre, delimited by dark brown scales. Upper side: Forewing: Marginal band uniformly dark, devoid of whitish areas, attaining ca. 1/3 of the costal margin. Costa and ca. half of the basal inner margin (space 1b) also blackish brown. Cell dot large, from the cell apex to the base of the median spaces, distally notched. Irregular small groups of dark scales occur, further, on the area above the cell and in middle area of the cell. Hindwing: Marginal band blackish, uniformly wide (ca. 3 mm) with small and not very conspicuous orange markings on spaces 1b, 2 and 3. Cell apex dot much longer than wide and smaller than that of the forewing. Reduced group of dark scales irregularly shaped at the basal area and a minute blackish dot in the middle of the cell. Under side: Forewing: Apical-marginal band ochre and greyish, the nerves dark brown, its inner limit (correspondent to the dorsal dark area) as an irregular dark line of dots; dot of the apex of the cell almost as big as dorsally though triangular. Hindwing: Dark dots restricted to the basal, sub-basal and discal areas. Sub-marginal semi-lunar greyish dots delimited by dark lines, the outer one almost black; semi-lunar marginal dots smaller, ochre-orange, as the wing ground-colour.”

Etymology: Named for its collector (Mendes & Bivar de Sousa, 2007).

Distribution: Angola (Central Angolan plateau).

Specific localities:

Angola – Huambo (TL).

Habitat: Nothing published.

Early stages: Nothing published.

Larval food: Nothing published.

Note: Gardiner, 2010 avers that *C. nozolinoi* may be a synonym of *C. trimeni*.

****Cooksonia trimeni* Druce, 1905**
Angular Tiger Mimic

Cooksonia trimeni Druce, 1905. *Transactions of the Entomological Society of London* **1905**: 257 (251-262).

Cooksonia trimeni Druce, 1905. d’Abreu, 2009: 626.



Cooksonia trimeni trimeni. Male A. Left – upperside; right – underside.
East Lumwana Mine Camp, NW Prov., Zambia. 26 October 2006.
Images M.C. Williams ex Gardiner Collection.



Cooksonia trimeni trimeni. Male B. Left – upperside; right – underside.
Mundwiji Plain, Mwinilunga, Zambia. 28 October 2006.
Images M.C. Williams ex Gardiner Collection.



Cooksonia trimeni trimeni. Female A. Left – upperside; right – underside.
East Lumwana Mine Camp, NW Prov., Zambia. 26 October 2006.
Images M.C. Williams ex Gardiner Collection.



Cooksonia trimeni trimeni. Female B. Left – upperside; right – underside.
Shikale, NW Province, Zambia. 9 November 2006.
Images M.C. Williams ex Gardiner Collection.

Type locality: [Democratic Republic of Congo] (not Zambia, *see* Cookson, 1954).

Distribution: Democratic Republic of Congo, Zambia (Gardiner, 2010b).

Habitat: Tall Miombo Woodland (Gardiner, 2010b).

Early stages: Nothing published.

Larval food: Nothing published.

Cooksonia trimeni trimeni Druce, 1905
Angular Tiger Mimic

Cooksonia trimeni Druce, 1905. *Transactions of the Entomological Society of London* **1905**: 257 (251-262).
Cooksonia trimeni trimeni Druce, 1905. d’Abrera, 2009: 626.



Cooksonia trimeni trimeni. Male A. Left – upperside; right – underside.
East Lumwana Mine Camp, NW Prov., Zambia. 26 October 2006.
Images M.C. Williams ex Gardiner Collection.



Cooksonia trimeni trimeni. Male B. Left – upperside; right – underside.
Mundwiji Plain, Mwinilunga, Zambia. 28 October 2006.
Images M.C. Williams ex Gardiner Collection.



Cooksonia trimeni trimeni. Female A. Left – upperside; right – underside.
East Lumwana Mine Camp, NW Prov., Zambia. 26 October 2006.
Images M.C. Williams ex Gardiner Collection.



Cooksonia trimeni trimeni. Female B. Left – upperside; right – underside.
Shikale, NW Province, Zambia. 9 November 2006.
Images M.C. Williams ex Gardiner Collection.

Type locality: [Democratic Republic of Congo] (not Zambia, *see* Cookson, 1954).

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

Cooksonia trimeni terpsichore Talbot, 1935
Katanga Angular Tiger Mimic

Cooksonia trimeni terpsichore Talbot, 1935. *Entomologist's Monthly Magazine* 71: 204 (202-209).
Cooksonia trimeni terpsichore Talbot, 1935. d'Abreera, 2009: 626.

Type locality: [Democratic Republic of Congo]: “Katanga: Lufira River, near Likasi Copper Mine, 4000 feet”.

Distribution: Democratic Republic of Congo (Shaba).

Specific localities:

Democratic Republic of Congo – Lufira River, near Likasi Copper Mine (TL).

Note: Collins & Larsen, 2008: 49 state that *terpsichore* Talbot, 1935 must be a junior synonym of *trimeni* Druce,

1905 but do not officially downgrade it as they were not able to examine the type of *terpsichore*.

Relevant literature:

Gardiner, 2010 [Sex-limited polymorphism].