

## Genus *Lafron* Grishin, 2020

### Coppers

Zhang, J., Cong, Q., Shen, J., Brockmann, E. & Grishin, N.V. 2019. Genomic evidence suggests further changes of butterfly names. *The Taxonomic Report of the International Lepidoptera Survey* **8** (7): 12 (1-41).

Type-species: *Papilio orus* Stoll, [1780], by original designation.

The genus *Lafron* belongs to the Family Lycaenidae Leach, 1815; Subfamily Lycaeninae Leach, 1815. There are no other genera in the Subfamily Lycaeninae in the Afrotropical Region.

*Lafron* (**Coppers**) is a purely Afrotropical genus, with two South African species.

#### Relevant literature:

Zhang *et al.*, 2020 [erection of genus *Lafron*].

De Jong & Van Dorp, 2006 [Notes on Afrotropical species and the Palearctic connection].

### *Lafron clarki* (Dickson, 1971)#

#### Eastern Sorrel Copper



Male Eastern Sorrel Copper (*Lafron clarki*)  
Images courtesy Steve Woodhall

*Lycaena clarki* Dickson. *In*: Clark & Dickson, 1971. *Life histories of the South African lycaenid butterflies*: 7 (272 pp.). Cape Town.

*Lycaena clarki* Dickson, 1971. Dickson & Kroon, 1978.

*Lycaena clarki* Dickson, 1971. Pringle *et al.*, 1994: 228.

*Lycaena clarki* Clark & Dickson, 1971. d'Abrera, 2009: 786. [authorship erroneous]

*Lafron clarki* (Dickson, 1971). Zhang *et al.*, 2020: 12.



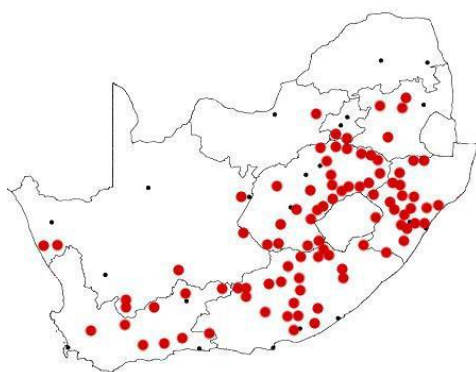
*Lafron clarki*. Male (Wingspan 25 mm). Left – upperside; right – underside.  
Hogsback, Eastern Cape Province, South Africa. 7 December 2006. J. Dobson.  
Images courtesy Jeremy and Chris Dobson.



*Lafron clarki*. Female (Wingspan 26 mm). Left – upperside; right – underside.  
Golden Gate Highlands N.P., Free State Province, South Africa. 12 January 2006. J. Dobson.  
Images courtesy Jeremy and Chris Dobson.

**Type locality:** South Africa: “Eastern Cape Province, Steynsburg”.

**Diagnosis:** Distinguished from *Lafron orus* by the light rings which enclose the dark spots on the underside of the hindwing (Pringle *et al.*, 1994).



#### Distribution of *Lafron clarki*

South Africa (Mpumalanga, North West Province, Gauteng, Free State Province, KwaZulu-Natal, Eastern Cape Province, Western Cape Province, Northern Cape Province), Lesotho.

**Distribution:** South Africa (Mpumalanga, North West Province, Gauteng, Free State Province, KwaZulu-Natal, Eastern Cape Province, Western Cape Province, Northern Cape Province), Lesotho.

**Specific localities:**

Free State Province – Sasolburg; Ladybrand (Pringle, *et al.*, 1994); Cyferfontein [-30.3736 25.8131] (R. Griesel, unpublished).

Eastern Cape Province – Steynsburg (TL).

Western Cape Province – Hex River Pass (White).

**Habitat:** Mainly in marshy areas and along stream banks, in grassland. Also occurs in the Karoo biome (Pringle *et al.*, 1994).

**Habits:** The flight is weak and specimens seldom move far from their water-loving larval host-plant (Pringle *et al.*, 1994).

**Flight period:** All year but commonest in summer (Pringle *et al.*, 1994).

**Early stages:**

Murray, 1935 [as *Heodes orus*].

Clark & Dickson, 1971: 104 [as *Lycaena clarki* sp. nov.; locality not noted].

“**Egg.** 0.6 mm diam. x 0.25 mm high. Laid singly on stalks. Whitish to pale dull yellow with irregular, flat, white netting-ribbing. Eggs hatch after 10-12 days. The discarded shells are not eaten. **Larva.** 1<sup>st</sup> instar 1 mm, growing to 2 mm in 4 days; 2<sup>nd</sup> instar growing to 3 mm in 4 days; 3<sup>rd</sup> instar growing to 5 mm in 4 days; 4<sup>th</sup> instar growing to 8 mm in 5 days; 5<sup>th</sup> instar growing to 15.5 mm in 7 days. There are neither tubercles nor honey-gland. Larvae feed on the surfaces of the leaves, leaving brown scores. Later they feed on the edges of the leaves, their bodies fitting into the portion eaten out and the larvae thus rendering themselves inconspicuous. The colour varies considerably, from plain green to pinkish red – but in either form with a white subspiracular stripe and a dorsal line of a darker colour-shade. There are also numerous intermediate shades of colouring. The food-plant frequently grows in water, sometimes becoming submerged, but the larvae are able to survive such submersion. No ants are in attendance. There is a succession of broods, but also a hibernating period, both in the egg and pupal state, when conditions call for this – judging by personal observations. **Pupa.** 10-10.5 mm. Attached to a stem or to dead leaves by the cremastral hooks and a girdle. The duration of the pupal period is about 12 days, but this may be considerably longer in the winter.”

**Larval food:**

*Rumex lanceolatus* Thunb. (syn. *ecklonianus* Meisn.) (Polygonaceae) [Clark & Dickson, 1971: 104].

***Lafron orus* (Stoll, [1780])#**  
**Western Sorrel Copper**

*Papilio orus* Stoll, [1780]. In: Stoll, [1780-82]. *Die Uitlandsche Kapellen voorkomende in de drie waerreldeelen Asia, Africa en America* **4** [part]: 84 (29-252). Amsteldam & Utrecht.

*Chrysophanus orus* Cramer. Trimen, 1866a. [misattribution of authorship]

*Chrysophanus orus* (Cramer, 1782). Trimen & Bowker, 1887b. [misattribution of authorship]

*Lycaena orus* Cramer. Swanepoel, 1953a. [incorrect author]

*Lycaena orus* (Stoll, 1780). Dickson & Kroon, 1978.

*Lycaena orus* (Stoll, 1780). Pringle *et al.*, 1994: 228.

*Lycaena orus* Cramer, 1780. d’Abreu, 2009: 786. [misattribution of authorship]

*Lafron orus* (Stoll, [1780]). Zhang *et al.*, 2020: 12.

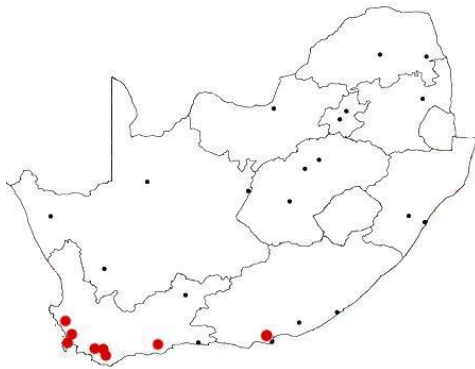


*Lafron orus*. Male (Wingspan 22 mm). Left – upperside; right – underside.  
Tygerberg, Western Cape Province, South Africa. J. Dobson.  
Images M.C. Williams ex Dobson Collection.



*Lafron orus*. Female (Wingspan 25 mm). Left – upperside; right – underside.  
Tygerberg, Western Cape Province, South Africa. J. Dobson.  
Images M.C. Williams ex Dobson Collection.

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



**Distribution of *Lafron orus***

Eastern Cape Province,  
Western Cape Province.

**Distribution:** South Africa (Eastern Cape Province, Western Cape Province).

**Specific localities:**

Eastern Cape Province – Suuranysberge near Joubertina (Pringle *et al.*, 1994).

Western Cape Province – Llandudno (Pringle *et al.*, 1994); Camps Bay (Pringle *et al.*, 1994);

Tygerberg (Pringle *et al.*, 1994); Dassenberg (Pringle *et al.*, 1994); Simonsberg (Pringle *et al.*, 1994); Mamre (Mecenero *et al.*, 2013).

**Habitat:** Fynbos. Occurs at various altitudes, from sea-level to montane localities (Pringle *et al.*, 1994).

**Habits:** Flies close to the ground, alighting on low vegetation, rocks or on the ground (Pringle *et al.*, 1994).

**Flight period:** All year but scarce in winter at higher altitudes (Pringle *et al.*, 1994).

**Early stages:**

Clark & Dickson, 1952: 34 [as *Heodes orus*].

Clark & Dickson, 1971: 101 [as *Lycaena orus*; Hottentots Huisie, Cape Peninsula, Western Cape].

“**Egg.** 0.6 mm diam. x 0.3 mm high. Laid singly but sometimes in close proximity to other eggs, among young leaves and flowers. Eggs are white with a flat ribbing on a flat surface. The roughly hexagonal pattern is composed of two reversed sets of ribbing, 10 in each set, emanating from the micropyle in involute-like curves. Eggs hatch after some 12 days but may be earlier or later. The discarded shell is not eaten. **Larva.** 1<sup>st</sup> instar 1 mm, growing to 2.25 mm in 4 days; 2<sup>nd</sup> instar growing to 3.5 mm in 4 days; 3<sup>rd</sup> instar growing to 6 mm in 4 days; 4<sup>th</sup> instar growing to 12-13 mm in 6 days. There are neither honey-gland nor tubercles. Larvae feed on the edge of the leaf, occupying the portion eaten out, the dorsal line of the larva resembling the actual edge of the leaf. The general colour matches the leaf or stalk where larvae are feeding. Some larvae are plain green, others have a pink or salmon dorsal stripe, while in others a whitish subspiracular stripe is added, sometimes with pinkish salmon above and below – and other larvae are dull pink with or without faint or dark red dorsal and subspiracular stripes. The small golden brown setae are interspaced with very small white globe-like setae. As the food-plant may be near water, larvae are often immersed but seem to be able to withstand lengthy periods of immersion. Ants are consequently not seen in attendance. **Pupa.** Male 7 mm; female 7.5 mm. Attached to a stem by the cremastral hooks and a girdle. The portion behind the head and the thorax is heavily coated with very small wineglass-like setae, and the body is sparsely coated with these setae. The wing-cases are devoid of setae. The imago emerges after some 12 days, longer in the winter; and with possible partial hibernation, at times.”

**Larval food:**

*Polygonum undulatum* (L.) P.J.Bergius (Polygonaceae) [Clark & Dickson, 1952: 35].

(Probably) *Rumex lanceolatus* Thunb. (Polygonaceae) [Pringle *et al.*, 1994: 228].

*arcas* Fabricius, 1787 (as sp. of *Papilio*). *Mantissa Insectorum* 2: 80 (382 pp.). Hafniae. [South Africa]: “Cap. Bon. Spei”.