

## Genus *Chloroselas* Butler, 1886

### Gems

*Proceedings of the Zoological Society of London* **1885** [1886]: 765 (756-776).

Type-species: *Chloroselas esmeralda* Butler, 1886, by original designation.

= *Desmolycaena* Trimen, 1898. *Transactions of the Entomological Society of London* **1898**: 7 (1-16). Type-species *Desmolycaena mazoensis* Trimen, 1898, by original designation. Treated as a good genus in Ackery *et al.*, 1995: 562 but regarded as a synonym of *Chloroselas* Butler by Heath, 1997 (*Metamorphosis Occasional Supplement* No. 2: 12 (1-60)).

= *Vansomerenia* Heath, 1997. Grishin in Zhang *et al.* 2023a. Butterfly classification and species discovery using genomics. *The taxonomic report of the international Lepidoptera survey*. **11**(3): 31.

The genus *Chloroselas* belongs to the Family Lycaenidae Leach, 1815; Subfamily Aphnaeinae Distant, 1884; Tribe Cigaritini ; Subtribe Cigaritina . The other genera in the Tribe Cigaritini in the Afrotropical Region are *Cigaritis*, *Chryсорitis*, *Pseudaletis*, *Crudaria* and *Lipaphnaeus*.

*Chloroselas* (**Gems**) is a purely Afrotropical genus containing 15 species.

## *Chloroselas arabica* (Riley, 1932)

*Desmolycaena arabica* Riley, 1932. *Annals and Magazine of Natural History* (10) **10**: 148 (137-152).

*Chloroselas arabica* (Riley, 1932). Heath, 1997: 13 **comb. nov.**

*Desmolycaena arabica* Riley, 1932. d'Abreu, 2009: 710. [invalid new combination – ignores Heath, 1997].



*Chloroselas arabica*. Male. Left – upperside; right – underside.  
Magadi Road, near Kisames, Kenya. 15 June 2002. A. Gardiner.  
Images M.C. Williams ex Gardiner Collection.

**Type locality:** Yemen: “Hadramaut”.

**Distribution:** Yemen, Somalia (north).

**Specific localities:**

Yemen – Wadi Hadhramaut (TL; Larsen, 1991c: 188).

**Habitat:** Nothing published.

**Habits:** Nothing published.

**Early stages:** Nothing published.

**Larval food:** Nothing published.

**Associated ant:** Nothing published.

## *Chloroselas argentea* Riley, 1932

Silver Gem

*Chloroselas argentea* Riley, 1932. *Annals and Magazine of Natural History* (10) **10**: 145 (137-152).  
*Chloroselas argentea* Riley, 1932. Dickson & Kroon, 1978.  
*Chloroselas argentea* Riley, 1932. Pringle *et al.*, 1994: 174.  
*Chloroselas argentea* Riley, 1932. d'Abreu, 2009: 709.

**Type locality:** [Zimbabwe]: “Xmas Pass”.

**Distribution:** Zimbabwe (Mutare and Harare districts).

**Specific localities:**

Zimbabwe – Christmas Pass (TL); Cross Kopje at Mutare (Pringle *et al.*, 1994); Harare (Pringle *et al.*, 1994); Arcturus (Pringle *et al.*, 1994); Chimanimani Mountains (Pringle *et al.*, 1994).

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

**Habits:** Like those of *Chloroselas pseudozeritis*. Specimens often fly high up in the tree-tops and are difficult to spot because of their small size and fast flight (Pringle *et al.*, 1994).

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

**Early stages:** Nothing published.

**Larval food:**

*Brachystegia spiciformis* Benth. (Fabaceae) [Pringle *et al.*, 1994: 174; locality not specified].  
(Possibly) *Acacia* species (Fabaceae) [Pennington, *vide* Pringle *et al.*, 1994: 174; Chimanimani Mountains, Zimbabwe].

**Associated ant:** Nothing published.

## *Chloroselas azurea* Butler, 1900

Azure Gem

*Chloroselas azurea* Butler, 1900. *Proceedings of the Zoological Society of London* **1899** [1900]: 967 (962-975).  
*Chloroselas azurea* Butler, 1899. d'Abreu, 2009: 708. [date of authorship erroneous].

**Type locality:** [Kenya]: “Slopes of Nthatha Hill, Kitwi, 4,700 ft.”.

**Distribution:** Kenya (central, east), Tanzania (north).

**Specific localities:**

Kenya – Nthatha Hill, Kitwi, 4,700 ft (TL); Tana River (Larsen, 1991c); Rabai (Larsen, 1991c); Ukambani (Larsen, 1991c).

Tanzania – Oldeani, 1 300 m (Kielland, 1990d).

**Habitat:** Dry savanna.

**Habits:** A rare species that occurs in localized colonies (Larsen, 1991c). Specimens are occasionally found feeding from flowers (Larsen, 1991c).

**Early stages:**

Congdon *et al.*, 2017 [final instar larva].

**Larval food:**

*Acacia zanzibarica* (S. Moore) Taub. (Fabaceae) [Congdon *et al.*, 2017; Mkwaga, Tanzania].

**Associated ant:** Nothing published.

## *Chloroselas esmeralda* Butler, 1886

Somali Gem

*Chloroselas esmeralda* Butler, 1886. *Proceedings of the Zoological Society of London* **1885** [1886]: 765 (756-776).  
*Chloroselas esmeralda* Butler, 1885. d'Abreu, 2009: 709. [date of authorship erroneous].



Painting of the type from the original publication (Butler, 1886)

**Type locality:** Somalia: “Bunder Maria”.

**Distribution:** Somalia, Ethiopia (Larsen, 1991c), Kenya, Uganda, Tanzania, Yemen, Oman.

**Habitat:** Arid savanna.

**Habits:** Generally rare but may be locally common if a colony is found (Larsen, 1991c).

**Early stages:** Nothing published.

**Larval food:**

Possibly *Vachellia tortilis* (Forssk.) Galasso & Banfi (Fabaceae) [Larsen, 1991c: 187; as sp. of *Acacia*; for subspecies *bilqis* Larsen].

**Associated ant:** Nothing published.

### *Chloroselas esmeralda esmeralda* Butler, 1886

*Chloroselas esmeralda* Butler, 1886. *Proceedings of the Zoological Society of London* **1885**: 765 (756-776).

*Chloroselas esmeralda esmeralda* Butler, 1885. d’Abrera, 2009: 709. [date of authorship erroneous].

**Type locality:** Somalia: “Bunder Maria”.

**Distribution:** Somalia, Ethiopia, Kenya, Uganda (west), Tanzania (north).

**Specific localities:**

Somalia – Bunder Maria (TL).

Ethiopia – Dire Dawa (Larsen, 1991c).

Kenya – Rabai (Larsen, 1991c); Garissa (Larsen, 1991c); Kulal (Larsen, 1991c); Kacheliba (Larsen, 1991c).

### *Chloroselas esmeralda bilqis* Larsen, 1983

*Chloroselas esmeralda bilqis* Larsen, 1983. *Fauna Saudi Arabia* **5**: 381 (333-478).

*Chloroselas esmeralda bilqis* Larsen, 1983. d’Abrera, 2009: 709.

**Type locality:** Yemen: “Yemen Arab Republic, Hajjah, Wadi Sharas, 900 m.”.

**Distribution:** Yemen, Oman.

**Specific localities:**

Yemen – Hajjah, Wadi Sharas, 900 m (TL).

Oman – Dhofar (Larsen, 1991c).

### *Chloroselas mazoensis* (Trimen, 1898)#

Purple Gem



Male Purple Gem (*Chloroselas mazoensis*), Phinda Reserve, KwaZulu-Natal.  
Image courtesy Steve Woodhall.

*Desmolycaena mazoensis* Trimen, 1898. *Transactions of the Entomological Society of London* **1898**: 8 (1-16).  
*Desmolycaena mazoensis* Trimen. Swanepoel, 1953a.  
*Desmolycaena mazoensis* Trimen, 1898. Dickson & Kroon, 1978.  
*Desmolycaena mazoensis* Trimen, 1898. Pringle *et al.*, 1994: 174.  
*Chloroselas mazoensis* (Trimen, 1898). Heath, 1997: 13 **comb. nov.**  
*Desmolycaena mazoensis* Trimen, 1898. d’Abrera, 2009: 710. [invalid new combination – ignores Heath, 1997].



*Chloroselas mazoensis*. Male. Left – upperside; right – underside.  
Headlands, Zimbabwe. 22 September 2001. A. Gardiner.  
Images M.C. Williams ex Gardiner Collection.



*Chloroselas mazoensis*. Female. Left – upperside; right – underside.  
Nyamgombe, north-west Zambia. 29 September 2011. A. Gardiner.  
Images M.C. Williams ex Gardiner Collection.

**Type locality:** [Zimbabwe]: “Mazoe River district of Mashunaland”.

**Distribution:** ? Kenya (Warren-Gash, 1993), Tanzania (south), Zambia, Zimbabwe, Botswana, South Africa (Limpopo Province, KwaZulu-Natal – north), Swaziland (Duke *et al.*, 1999).

**Specific localities:**

Tanzania – Madibira, west of Mufindi (Congdon, *vide* Kielland, 1990d); Ndumbi Gorge, near Chimala (Congdon, *vide* Kielland, 1990d).

Zambia – Kamaila Forest Reserve, north of Lusaka (Heath *et al.*, 2002); Ndola (Heath *et al.*, 2002); Chisamba (Heath *et al.*, 2002).

Zimbabwe – Mazowe Valley (TL; Marshall); Cross Kopje, Mutare; Bazely Bridge (Pringle *et al.*, 1994; male illustrated above); Dete (Lannin); Selukwe (Stevenson).

Botswana – Lobatse (C. Cottrell *vide* Dickson & Kroon, 1978).

Limpopo Province – near Soekmekeer (Swanepoel, 1953); Punda Maria (Pringle *et al.*, 1994).

KwaZulu-Natal – Hluhluwe (Swanepoel, 1953); southern end of Lebombo Mountains (Pennington, 1956); Makatini Flats (Pringle *et al.*, 1994).

**Habitat:** Dry savanna. In Tanzania at altitudes of between 1 200 to 1 400 m (Kielland, 1990d).

**Habits:** Males whirl rapidly around the crowns of acacia trees, frequently settling on the leaves or twigs (Pringle *et al.*, 1994).

**Flight period:** September to December, with a peak in October. There are odd records for the winter months (Pringle *et al.*, 1994).

**Early stages:**

Pennington, 1956: 36 [Lebombo Hills, KwaZulu-Natal].

**Larval food:**

(Probably) *Acacia* species (Fabaceae) [Pennington, 1956: 36; Lebombo Hills, KwaZulu-Natal].

**Associated ant:** Nothing published.

### *Chloroselas minima* Jackson, 1966

Tiny Gem

*Chloroselas minima* Jackson, 1966. *Annals and Magazine of Natural History* (13) **8**: 524 (523-531).

*Chloroselas minima* Jackson, 1966. d'Abreu, 2009: 709.

**Type locality:** Kenya: “Tana, Garissa-Bura”.

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

**Specific localities:**

Kenya – Tana, Garissa-Bura (TL); Rabai (Larsen, 1991c); Ukambani district (Larsen, 1991c); Galana (Larsen, 1991c); Mrima Hill area (Larsen, 1991c); Mariakani (Larsen, 1991c); Arabuko-Sokoce (Larsen, 1991c).

Tanzania – Lake Tanganyika (Kielland, 1978); Meto Hills (Kielland, 1990d; rare).

**Habitat:** Arid savanna.

**Habits:** Specimens are sometimes encountered singly, feeding from flowers, in open grassland (Larsen, 1991c). They appear to fly only after rain, when the grass is green (Larsen, 1991c).

**Early stages:** Nothing published.

**Larval food:** Nothing published.

**Associated ant:** Nothing published.

### *Chloroselas ogadenensis* Jackson, 1966

*Chloroselas ogadenensis* Jackson, 1966. *Annals and Magazine of Natural History* (13) **8**: 526 (523-531).

*Chloroselas ogadenensis* Jackson, 1966. d'Abreu, 2009: 709.

**Type locality:** Somalia: “Ogaden, Dagahbur”.

**Distribution:** Somalia.

Known only from the type locality.

**Specific localities:**

Somalia – Dagahbur, Ogaden (TL).

**Habitat:** Nothing published.

**Habits:** Nothing published.

**Early stages:** Nothing published.

**Larval food:** Nothing published.

**Associated ant:** Nothing published.



## *Chloroselas overlaeti* Stempffer, 1956

*Chloroselas overlaeti* Stempffer, 1956. *Annales du Musée Royal du Congo Belge* (8) (Sciences zoologique) **49**: 36 (54 pp.).  
*Chloroselas overlaeti* Stempffer, 1956. d'Abrera, 2009: 708.



*Chloroselas overlaeti*. Male. Left – upperside; right – underside.  
Musa Hill, East Lumwana, Zambia. 15 September 2005. A. Gardiner.  
Images M.C. Williams ex Gardiner Collection.

**Type locality:** [Democratic Republic of Congo]: “rivière Lupweshi, Lualaba”.

**Distribution:** Democratic Republic of Congo (south-east – Lualaba), Tanzania (west), Zambia.

**Specific localities:**

Democratic Republic of Congo – Lupweshi River, Lualaba (TL).

Tanzania – Mpanda (Kielland, 1990d); Kigoma (Kielland, 1990d).

Zambia – Ikelenge (Heath *et al.*, 2002); Kamaila Forest Reserve, north of Lusaka (Heath *et al.*, 2002); Ndola (Heath *et al.*, 2002); Mufulira (Heath *et al.*, 2002); 18 km west of Solwezi (male specimen illustrated, above).

**Habitat:** Woodland (Kielland, 1990d).

**Habits:** An uncommon and local species (Kielland, 1990d).

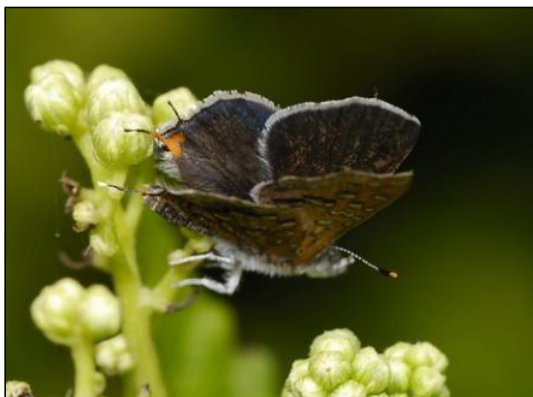
**Early stages:** Nothing published.

**Larval food:** Nothing published.

**Associated ant:** Nothing published.

## *Chloroselas pseudozeritis* (Trimen, 1873)#

Brilliant Gem



Male (left) and female (right) Brilliant Gem (*Chloroselas pseudozeritis*).

Images courtesy Steve Woodhall.

*Aphnaeus pseudozeritis* Trimen, 1873. *Transactions of the Entomological Society of London* **1873**: 113 (101-124).  
*Aphnaeus pseudo-zeritis* Trimen, 1873. Trimen & Bowker, 1887b.  
*Chlorozelas pseudozeritis* Trimen. Swanepoel, 1953a. [misspelling of *Chloroselas*]  
*Chloroselas pseudozeritis* (Trimen, 1873). Dickson & Kroon, 1978.  
*Chloroselas pseudozeritis* (Trimen, 1873). Pringle *et al.*, 1994: 173.  
*Chloroselas pseudozeritis* Trimen, 1873. d'Abbrera, 2009: 708.



*Chloroselas pseudozeritis pseudozeritis*. Male (Wingspan 21 mm). Left – upperside; right – underside.  
 Arcturus, Zimbabwe. 15 October 1987. A. Gardiner.  
 Images M.C. Williams ex Gardiner Collection.



*Chloroselas pseudozeritis pseudozeritis*. Female (Wingspan 23 mm). Left – upperside; right – underside.  
 Arcturus, Zimbabwe. 16 October 1987. A. Gardiner.  
 Images M.C. Williams ex Williams Collection.

**Type locality:** [South Africa]: “Bathurst, Cape Colony”.

**Distribution:** Central African Republic, Ethiopia, Kenya, Tanzania, Malawi, Zambia, Mozambique, Zimbabwe, Botswana (Kielland, 1990d), South Africa, Swaziland.

**Habitat:** Deciduous woodland and thornbush savannas. In Tanzania it flies at altitudes between 1 000 and 1 500 m (Kielland, 1990d).

**Habits:** A rare species that occurs in localised colonies associated with one or more large acacia trees. Flowers are visited (Larsen, 1991c). Sometimes the colonies are quite large. Specimens whirl around the tops of the acacia trees, perching at the ends of small twigs (Larsen, 1991c; Pringle *et al.*, 1994).

**Flight period:** All year, with October and May the most favourable months (Pringle *et al.*, 1994).

**Early stages:**

Van Someren, *vide* Kielland, 1990d: 184.

Eggs are laid on young shoots of *Acacia stenocarpa* [now *Vachellia hockii*]. Young larvae found in massed leaflets and twigs, but later found in cracks in bark, where they pupate. Attended by *Crematogaster* ants.

Bampton, Mullin & Paré, in Pringle *et al.*, 1994: 173 [for subspecies *pseudozeritis*; Arcturus, Zimbabwe].

“Larvae and pupae have been recorded in tunnels in the twigs of *Julbernardia globiflora* (Benth.) Troupin, in association with *Crematogaster* ants, by Bampton, Mullin and Paré at Arcturus in Zimbabwe.”

**Larval food:**

*Brachystegia spiciformis* Benth. (Fabaceae) [Heath *et al.*, 2002: 90].

*Julbernardia globiflora* (Benth.) Troupin (Fabaceae) [Bampton, Mullin and Paré, *in* Pringle *et al.*, 1994: 173; for *Chloroselas pseudozeritis pseudozeritis*; Arcturus, Zimbabwe].

*Vachellia drepanolobium* (Harms ex Sjöstedt) P.J.H. Hurter (Fabaceae) [Collins and Bampton, *in* Heath, 1997: 12; as sp. of *Acacia*; for *Chloroselas pseudozeritis tytleri* Riley].

*Vachellia hockii* (De Wild.) Seigler & Ebinger (Fabaceae) [Van Someren, *vide* Kielland, 1990d: 184; as *Acacia stenocarpa*].

*Valchellia nilotica* (L.) P.J.H. Hurter & Mabb. [Williams, unpublished; Nibela Peninsula, KwaZulu-Natal, South Africa, Nov. 2010].

**Associated ant:**

*Crematogaster* species [Van Someren, *vide* Kielland, 1990d: 184; Bampton, Mullin and Paré, *in* Pringle *et al.*, 1994: 173; Arcturus, Zimbabwe].

*Chloroselas pseudozeritis pseudozeritis* (Trimen, 1873)#

**Brilliant Gem**

*Aphnaeus pseudozeritis* Trimen, 1873. *Transactions of the Entomological Society of London* **1873**: 113 (101-124).

*Aphnaeus pseudo-zeritis* Trimen, 1873. Trimen & Bowker, 1887b.

*Chloroselas pseudozeritis* Trimen. Swanepoel, 1953a. [misspelling of *Chloroselas*]

*Chloroselas pseudozeritis* (Trimen, 1873). Dickson & Kroon, 1978.

*Chloroselas pseudozeritis pseudozeritis* (Trimen, 1873). Pringle *et al.*, 1994: 173.

*Chloroselas pseudozeritis pseudozeritis* Trimen, 1873. d'Abreu, 2009: 708.



*Chloroselas pseudozeritis pseudozeritis*. Male (Wingspan 21 mm). Left – upperside; right – underside.  
Arcturus, Zimbabwe. 15 October 1987. A. Gardiner.  
Images M.C. Williams ex Gardiner Collection.



*Chloroselas pseudozeritis pseudozeritis*. Female (Wingspan 23 mm). Left – upperside; right – underside.  
Arcturus, Zimbabwe. 16 October 1987. A. Gardiner.  
Images M.C. Williams ex Williams Collection.

**Type locality:** [South Africa]: “Bathurst, Cape Colony”.



**Distribution:** Malawi, Zambia, Mozambique, Zimbabwe, Botswana (Kielland, 1990d), South Africa (Limpopo Province, Mpumalanga, Gauteng, KwaZulu-Natal, Eastern Cape Province), Swaziland.

**Specific localities:**

Zambia – Lusaka (Heath *et al.*, 2002); Chisamba (Heath *et al.*, 2002); Mumbwa (Heath *et al.*, 2002).

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

Zimbabwe – Mutare (Pringle *et al.*, 1994); Trelawney (Pringle *et al.*, 1994; male illustrated above); Arcturus (Pringle *et al.*, 1994).

Botswana – Tswapong Hills (A. Gardiner, 2001 *vide* Larsen, 1991).

Limpopo Province – Warmbaths (Swanepoel, 1953); Munnik (Swanepoel, 1953); Molimo's location (Swanepoel, 1953); Soekmekeer (Pringle *et al.*, 1994); Punda Maria (Pringle *et al.*, 1994).

Mpumalanga – Lydenburg (Pringle *et al.*, 1994); Satara (Pringle *et al.*, 1994).

Gauteng – Saltpan, Pretoria (Tswaing) (Swanepoel, 1953).

KwaZulu-Natal – Bushmans River, near Estcourt (Hutchinson); Umkomaas (Swanepoel, 1953); Durban (Swanepoel, 1953); Clare Estate (Swanepoel, 1953); Sydenham (Swanepoel, 1953); Spitzkop (Swanepoel, 1953); False Bay (Swanepoel, 1953); Hluhluwe (Swanepoel, 1953); Estcourt (Pringle *et al.*, 1994); Nadi (Pringle *et al.*, 1994); Umgeni Valley (above Nagle Dam) (Pringle *et al.*, 1994); Impanza (Pringle *et al.*, 1994); Makatini Flats (Pringle *et al.*, 1994).

Eastern Cape Province – Tharfield, near Bathurst (TL).

Swaziland – Singceni (Pringle *et al.*, 1994).

### *Chloroselas pseudozeritis tyleri* Riley, 1932

*Chloroselas pseudozeritis tyleri* Riley, 1932. *Annals and Magazine of Natural History* (10) **10**: 147 (137-152).

*Chloroselas pseudozeritis tyleri* Riley, 1932. d'Abreu, 2009: 708.

**Type locality:** [Tanzania]: “East Africa, Tonjido (recte Longido?), 4,500 ft.”

**Distribution:** Ethiopia, Kenya (central, east, west), Tanzania.

**Specific localities:**

Kenya – Rabai (Larsen, 1991c); Ngong (Larsen, 1991c); Kima (Larsen, 1991c); Garissa (Larsen, 1991c); Bissil (Larsen, 1991c); Makueni (Larsen, 1991c); Shimba Hills (Larsen, 1991c); South Kavirondo (Larsen, 1991c); Kisumu (Larsen, 1991c); Kacheliba (Larsen, 1991c).

Tanzania – Mount Longido (TL); Northern Highlands (Kielland, 1990d); Mpanda District (Kielland, 1990d); Madibira close to Mufindi District (Kielland, 1990d); Ndumbi Gorge near Chimala (Kielland, 1990d); Ruaha National Park (Kielland, 1990d).

### *Chloroselas pseudozeritis ngottoana* Libert & Annoyer, 2015

*Chloroselas pseudozeritis ngottoana* Libert & Annoyer, 2015. *Bulletin de la Société entomologique de France* **120**(1): 34 (31-36).

**Type locality:** [Central African Republic]: “Forêt de Ngotto (4°04'34,5''N - 17°07'27,7''E ; 538 m), RCA, 20.I.2005 (*Ph. Annoyer*); genitalia Libert 112-267; BOLD: MLIB-0939.” Holotype male in the Muséum national d'Histoire naturelle, Paris.

**Distribution:** Central African Republic.

**Specific localities:**

Central African Republic – Ngotto Forest (TL).

### *Chloroselas umbrosa* Talbot, 1935

*Chloroselas pseudozeritis tyleri* f. *umbrosa* Talbot, 1935. *Entomologist's Monthly Magazine* **71**: 207 (202-209).

*Chloroselas pseudozeritis* form *umbrosa* Jackson, 1966. *Annals and Magazine of Natural History* (13) **8**: 524 (523-531).

*Chloroselas umbrosa* Jackson, 1966. Larsen, 1991c: 187.

*Chloroselas pseudozeritis umbrosa* Talbot, 1966. [date of authorship erroneous; should be 1935]

**Type locality:** Kenya: [“Mt. Elgon”].

**Distribution:** Uganda (east), Kenya (west).

**Specific localities:**

Kenya – Mount Elgon area (TL); South Kavirondo (Larsen, 1991c); Kisumu (Larsen, 1991c).

**Habitat:** Moist savanna (Larsen, 1991c).

**Habits:** Nothing published.

**Early stages:**

Jackson, 1937: 218 [for *Chloroselas pseudozeritis umbrosa*; Mount Elgon, Kenya].

“The larva is found in the early stages on the terminal shoots of *Acacia stenocarpa* Hochst. [now *Vachellia hockii*], Mimosaceae, always, however, on the stems; later it travels down to the bark of the tree. Egg. Not known. Larva. The larva is light brown with a darker dorsal line and wavy black lines along the centre of the sides. It is flattened, with the dorsum evenly rounded, and the margins scalloped and bearing long hair. The collar is armoured with a polished black chitinous plate, as also is the anal extremity. Head very small. Tubercles are present on the edges of the supranal plate, and are exerted on stimulation and vibrated rapidly from side to side; they are long and whitish. Strangely enough there appear to be two glands, for the ants attend to a darker oval area just above the anal plate, and also to a structure under the collar. After many hours of watching under a lens, I am convinced that this is so, for an ant having once found the collar does not leave it, and they never showed a preference for the anal gland. The larvae are always covered with ants, and, in fact, are never without them and, as one would expect, quickly die if the ants are removed. Length, 15 mm. Pupa. The pupa is hidden in cracks or under the bark. It is black and polished. In shape narrow, with prominent head-case and shoulders, the thorax slightly ridged, while the abdominal segments are tapered evenly to the extremity. The latter is slightly stalked and folded beneath the pupa for attachment to the bark. Length, 10 mm. Note on the probable food. When very young the larva is found on the small twigs among ants, although the twig need not necessarily be carrying any leaves. Usually the ants are attending a scale insect and the larva lies among these. A twig carrying scale, however, and not ants, does not satisfy it, and I therefore came to the conclusion that the food has something to do with the ants and not with the scale. Having a few larvae which had not fed for some days, I presented them with a fresh twig covered with scale which the ants had been attending, and the surface of the twig was very carefully examined from end to end with a slow waving motion of the head. Every now and then the head was dropped motionless on to the twig and left there for a few seconds, as if sucking something; the scale was left severely alone and not even investigated. When about half grown the larvae leave the twigs and are found in the ant-runs on the bark, where again I have seen them moving very slowly over the surface. Although many hours have been spent watching, I have never seen an ant feed them. The mouth-parts have not been examined here microscopically, but they seem to be very minute and to suggest some secretion as the food; it is possible that it feeds upon something left in the runs by the ants, perhaps the excreta. Ant associated. *Crematogaster (Acrocoelia) gerstaeckeri* D.T. st. *sjoestedti* Mayr. var. *tricoloroides* Sants. Locality. Mt. Elgon, 18 miles S.W. of Kitale, 6-7000 feet, April and November, 1932.”

**Larval food:**

Ant regurgitations [Pierce, 1995; for *Chloroselas pseudozeritis umbrosa* Jackson] (*Journal of the Lepidopterists' Society* **49**: 412-453).

*Vachellia hockii* (De Wild.) Seigler & Ebinger (Fabaceae) [Jackson, 1937: 218; as *Acacia stenocarpa* Hochst.; Mount Elgon, Kenya; for *Chloroselas pseudozeritis umbrosa*].

**Associated ant:**

*Crematogaster (Acrocoelia) gerstaeckeri* D.T. st. *sjoestedti* Mayr. var. *tricoloroides* Sants. [Jackson, 1937: 218; Mount Elgon, Kenya].

**Note:** D’Abrera (2009: 708) treats *umbrosa* Talbot, 1966 [should be 1935] as a subspecies of *pseudozeritis*, without reference to Larsen, 1991c, who treated it as a valid species.

## *Chloroselas tamaniba* (Walker, 1870)

*Aphnaeus tamaniba* Walker, 1870. *Entomologist* **5**: 51 (48-57).

**Type locality:** Sudan: “Hor famanib”.

**Distribution:** Sudan.

The description is inadequate and the type lost. In Jackson’s opinion (1966: 526) it should be considered a ‘*nomen dubium*’.

**Specific localities:**

Sudan – Hor famanib (TL).

**Habitat:** Nothing published.

**Habits:** Nothing published.

**Early stages:** Nothing published.

**Larval food:** Nothing published.

**Associated ant:** Nothing published.

### *Chloroselas taposana* Riley, 1932

*Chloroselas taposana* Riley, 1932. *Annals and Magazine of Natural History* (10) **10**: 146 (137-152).

*Chloroselas taposana* Riley, 1932. d'Abreu, 2009: 708.

**Type locality:** Sudan: “South Sudan, Taposa, Upper Nile Province, near Akobo Post, Akobo River”.  
Apparently known from only two specimens (Larsen, 1991c: 188).

**Distribution:** Sudan.

Known only from the type locality.

**Specific localities:**

Sudan – Taposa (TL).

**Early stages:** Nothing published.

**Larval food:** Nothing published.

**Associated ant:** Nothing published.

### *Chloroselas trembathi* Collins & Larsen, 1991

Trembath's Gem

*Chloroselas trembathi* Collins & Larsen, 1991. *In*: Larsen, 1991. *The butterflies of Kenya and their natural history*: 188, 438 (490 pp.). Oxford.

*Chloroselas trembathi* Collins & Larsen, 1991. d'Abreu, 2009: 709.

**Type locality:** Kenya: “near Meru National Park”.

Known only from the female holotype.

**Distribution:** Kenya.

Known only from the type locality.

**Specific localities:**

Kenya – near Meru National Park (TL).

**Habitat:** Open savanna (Larsen, 1991c: 188).

**Habits:** The only known specimen, a female, was captured while sitting on a small bush (Larsen, 1991c).

**Flight period:** The unique female specimen was captured in December.

**Early stages:** Nothing published.

**Larval food:** Nothing published.

**Associated ant:** Nothing published.

### *Chloroselas vansomereni* Jackson, 1966

Van Someren's Gem

*Chloroselas vansomereni* Jackson, 1966. *Annals and Magazine of Natural History* (13) **8**: 525 (523-531).

*Chloroselas vansomereni* Jackson, 1966. d'Abreu, 2009: 709.

**Type locality:** Kenya: “Tana River; Garissa-Bura”.

**Distribution:** Kenya (Tana River).

**Specific localities:**

Kenya – known only from the type locality, Garissa-Bura, which is on the Tana River (Larsen, 1991c).

**Habitat:** Nothing published.  
**Habits:** Nothing published.  
**Early stages:** Nothing published.  
**Larval food:** Nothing published.  
**Associated ant:** Nothing published.

### *Chloroselas rogersi* (Riley, 1932)

#### Savanna Gem

*Desmolycaena rogersi* Riley, 1932. *Annals and Magazine of Natural History* (10) **10**: 149 (137-152).  
*Vansomerenia rogersi* (Riley, 1932). Heath, 1997: 13 **comb. nov.**  
*Desmolycaena rogersi* Riley, 1932). d'Abreu, 2009: 710. [invalid combination – ignores Heath, 1997].  
*Chloroselas rogersi* (Riley, 1932) **comb. nov.** Grishin, 2023a

**Type locality:** [Tanzania]: “Tanganyika Territory, Kongwa, nr. railway, c. 210 m. W. of Dar-es- Salaam”.

**Distribution:** Kenya (central), Tanzania (north).

**Specific localities:**

Kenya – Ngong (Larsen, 1991c); Kima (Larsen, 1991c); Kathini Ridge (Larsen, 1991c); Nanyuki (Larsen, 1991c).

Tanzania – Kongwa, west of Dar es Salaam (TL).

**Habitat:** Open savanna (Larsen, 1991c).

**Habits:** Apparently this species may be locally numerous (Larsen, 1991c). The flight is fast but specimens readily come to flowers (Larsen, 1991c).

**Early stages:**

Nothing published.

**Larval food:**

Nothing published.

**Associated ant:**

Nothing published.