

Genus *Ortholexis* Karsch, 1895 Scarce Sprites

Entomologische Nachrichten. Berlin **21**: 319 (289-322). Type-species: *Ortholexis melichroptera* Karsch, by monotypy.

= *Acallopiestes* Holland, 1896. *Proceedings of the Zoological Society of London* **1896**: 95 (2-107). Type-species: *Erionota holocausta* Mabille, by original designation.

The genus *Ortholexis* belongs to the Family HesperIIDae Latreille, 1809; Subfamily Katreinae Grishin, 2019. The other genus in this Afrotropical subfamily is *Katreus*.

Ortholexis (**Scarce Sprites**) is a wholly Afrotropical genus comprising four species.

The genus *Loxolexis* Karsch, 1895 is (correctly) treated as a synonym of *Katreus* Watson, 1893 by Ackery *et al.*, 1995 but was re-instated as a valid genus by Larsen, 2005a: 469, **stat. nov.**. However, *Loxolexis* is not available for this group of species, because its type species (*percnoptera* Karsch) is a junior subjective synonym of *johnstonii* Butler, the type species of *Katreus*; thus, *Loxolexis* and *Katreus* are subjective synonyms. The oldest available name for these species is *Ortholexis* Karsch, 1895 (Lamas, pers. comm., April, 2008). The taxonomy was formally stabilized by Cock & Congdon, 2011: 5 as *Ortholexis* Karsch 1895 **stat. rev.**

**Ortholexis melichroptera* Karsch, 1895 Black Scarce Sprite

Acallopiestes dimidia Holland, 1896. *Proceedings of the Zoological Society of London* **1896**: 97 (2-107).

Katreus dimidia (Holland, 1896). Ackery *et al.*, 1995.

Loxolexis dimidia (Holland, 1896). Larsen, 2005a: 469.

Ortholexis dimidia (Holland, 1896). Lamas, pers. comm., April, 2008.

Ortholexis dimidia (Holland, 1896). Cock & Congdon, 2011b **comb. nov.**

Ortholexis melichroptera Karsch, 1895. *Entomologische Nachrichten. Berlin* **21**: 320 (289-322). Zhang *et al.*, 2019: 98. [*dimidia* is a junior subjective synonym of *melichroptera*].



Ortholexis melichroptera. Male. Left – upperside; right – underside.
Cape Three Points, Ghana. April 2010. SY, RV. ABRI-2019-2026.
Images MC Williams ex ABRI Collection.



Ortholexis melichroptera. Female. Left – upperside; right – underside.
Mondah, Gabon. October 2006. Vande Weghe. ABRI-2019-2027.
Images MC Williams ex ABRI Collection.

Type locality: Cameroon: “Victoria in Kamerun”.

Distribution: Liberia, Ghana, Nigeria (Cross River loop), Cameroon, Gabon.

Specific localities:

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

Ghana – Bia National Park (ABRI, *vide* Larsen, 2005a).

Nigeria – Calabar (Larsen, 2005a); Ikom (Larsen, 2005a).

Cameroon – Korup National Park (Larsen, 2005a).

Gabon – Mondah (Vande weghe, 2010).

Habitat: Dense primary forest (Larsen, 2005a).

Habits: This is an extremely rare butterfly (Larsen, 2005a). Males display by flying rapidly in tight circles in forest clearings and along forest paths. Every few minutes they alight with expanded wings on the underside of leaves, less than a metre above the ground (Larsen, 2005a).

Early stages: Nothing published.

Larval food: Nothing published.

dimidia Holland, 1896 (as sp. of *Ortholexis*). *Proceedings of the Zoological Society of London* **1896**: 97 (2-107).
Gabon: “Gaboön”. Junior subjective synonym of *melichroptera* Karsch, 1895 (Zhang *et al.*, 2019: 98).
Note: Zhang *et al.* sequenced a syntype of *Erionota holocausta* Mabille, 1891 (judging from the original description (Mabille 1891) the type series of this species almost certainly consisted of this single syntype), and the holotypes of *Acallopiestes dimidia* Holland, 1896 and *Ortholexis melichroptera* Karsch, 1895, which are in the Museum für Naturkunde, Berlin, Germany. The phylogenetic trees revealed that *O. melichroptera* is not a female of *O. holocausta* as it has been assumed (Evans 1937), but instead a female of *O. dimidia*. This association of sexes is supported by both nuclear (protein-coding genes of autosomes and of Z-chromosome) and mitochondrial (all genes) DNA trees. COI barcodes of the *O. holocausta* syntype and *O. melichroptera* holotype differ by 8.8% (58 bp), but barcodes of *O. melichroptera* and *O. dimidia* are essentially identical (1 bp difference). Thus, they concluded that *O. dimidia* syn. n. is a junior subjective synonym of *O. melichroptera*.

****Ortholexis hollandi* Druce, 1909**

Holland’s Scarce Sprite

Ortholexis hollandi Druce, 1909. *Proceedings of the Zoological Society of London* **1909**: 407 (406-413).

Synonym of *Katreus dimidia* (Holland, 1896). Ackery *et al.*, 1995.

Loxolexis hollandi (Druce, 1909). Larsen, 2005a: 470.

Ortholexis hollandi Druce, 1909. Lamas, pers. comm., April, 2008.

Ortholexis hollandi Druce, 1909. Cock & Congdon, 2011b **comb. rev.**



Ortholexis hollandi. Male. Left – upperside; right – underside.
Pampusu, western Ghana. May 2010. R. Vorgas. ABRI-2019-2028.
Images MC Williams ex ABRI Collection.



Ortholexis hollandi. Female. Left – upperside; right – underside.
Bia, western Ghana. January 2010. S. Yevu, R. Vorgas. ABRI-2019-2029.
Images MC Williams ex ABRI Collection.

Type locality: Cameroon: “Bitje, Ja River, Cameroons, 2000 feet”; [Democratic Republic of Congo]: “Upper Kasai District, Congo Free State”.

Distribution: Guinea, Liberia, Ivory Coast, Ghana, Nigeria, Cameroon, Gabon, Congo, Angola, Democratic Republic of Congo, Zambia.

Specific localities:

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

Liberia – Fish Lake (Larsen, 2005a); Wologizi (Safian *et al.*, 2020).

Ivory Coast – Yapo (Larsen, 2005a); Lamto (Larsen, 2005a); Abengourou (Larsen, 2005a); Banco (Larsen, 2005a); Tai National Park (Larsen, 2005a).

Ghana – Ankasa (Larsen, 2005a); Bia (Larsen, 2005a); Cape Three Points (Larsen, 2005a); Atewa (Larsen, 2005a); Bobiri Butterfly Sanctuary (Larsen *et al.*, 2007).

Nigeria – Awka (Larsen, 2005a); Mamu Forest (Larsen, 2005a).

Cameroon – Bitje (TL).

Gabon – Rabi (Vande weghe, 2010); Nouna (Vande weghe, 2010).

Angola – Casuallala (Evans, 1937); Kwanza Norte Province; Huambo Province (Mendes *et al.*, 2013).

Democratic Republic of Congo – Upper Kasai District (Druce, 1909).

Zambia – Known only from the Zambezi Rapids, near Ikelenge (Heath *et al.*, 2002).

Habitat: Mainly in wetter forest (Larsen, 2005a).

Habits: A little commoner than other members of the genus (Larsen, 2005a). The flight pattern is extremely fast, and close to the ground, with periodic rests on the underside of broad leaves (Larsen, 2005a).

Early stages: Nothing published.

Larval food:

Strophanthus sarmentosus DC. (Apocynaceae) [Vauttoux, 1999; Lamto, Ivory Coast].

karschi Evans, 1937 (as f. of *Katreus dimidia*). *A catalogue of the African HesperIIDae indicating the classification and nomenclature adopted in the British Museum*: 17 (212 pp.). Angola: “N. Angola

(Casuallala)". **Note:** According to Larsen (2005a: 470) this taxon is perhaps an aberrant *O. hollandi* but it may be a valid subspecies.

****Ortholexis drucei* (Evans, 1937)**

Katreus dimidia f. *drucei* Evans, 1937. *A catalogue of the African Hesperitidae indicating the classification and nomenclature adopted in the British Museum* 17: (212 pp.). Cameroon: "Cameroons".

Synonym of *Katreus dimidia* (Holland, 1896) in Ackery *et al.*, 1995.

Katreus drucei Evans, 1937. Larsen, 1999.

Loxolexis drucei (Evans, 1937). Larsen, 2005a.

Ortholexis drucei (Evans, 1937). Lamas, pers. comm., April, 2008.



Ortholexis drucei. Male. Wingspan 39 mm. Left – upperside; right – underside.
Dja River, Cameroon. January 2008. P.A. ABRI-2019-2030.
Images MC Williams ex ABRI Collection.



Ortholexis drucei. Female. Wingspan 38 mm. Left – upperside; right – underside.
Londi-Kribi, southern Cameroon. February 1992. SC. ABRI-2019-2031.
Images MC Williams ex ABRI Collection.

Type locality: Cameroon: "Cameroons".

Distribution: Cameroon, Gabon.

Recorded, erroneously, (misidentified) from Zambia (Heath *et al.*, 2002: 2).

Specific localities:

Cameroon – Bitje (Larsen, 2005a); Maan (S. Collins; male illustrated above); Londji/Kribi (S. Collins; female illustrated above).

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

Habitat: Forest.

Early stages: Nothing published.

Larval food: Nothing published.

****Ortholexis holocausta* (Mabille, 1891)**

Cinnamon Scarce Sprite

Erionota holocausta Mabille, 1891. *Bulletin de la Société Entomologique de Belgique* 35: 111 (59-88, 106-121, 168-187).

Katreus holocausta (Mabille, 1891). Ackery *et al.*, 1995.

Loxolexis holocausta (Mabille, 1891). Larsen, 2005a: 469.

Ortholexis holocausta (Mabille, 1891). Lamas, pers. comm., April, 2008.

Ortholexis holocausta (Mabille, 1891). Cock & Congdon, 2011b **comb. nov.**



Ortholexis holocausta. Male. Wingspan 48 mm. Left – upperside; right – underside.
Nyong River, Cameroon. March 2002. SC. ABRI-2019-2076.
Images MC Williams ex ABRI Collection.



Ortholexis holocausta. Female. Left – upperside; right – underside.
Zambezi Bridge, Ikelenge, Zambia. 18 April 2002.
Images MC Williams ex Gardiner Collection.

Type locality: Cameroon: “Barombi-Station”.

Distribution: Sierra Leone, Ivory Coast (Warren-Gash, pers. comm., 2002), Ghana, Nigeria, Cameroon, Gabon, Congo, Democratic Republic of Congo, Zambia (north-west).

Specific localities:

Sierra Leone – Guma Valley, Freetown (C. Belcastro, *vide* Larsen, 2005a); Tiwai Island (C. Belcastro, *vide* Larsen, 2005a).

Ivory Coast – Alepe (H. Warren-Gash, *vide* Larsen, 2005a); Tai National Park (H. Warren-Gash, *vide* Larsen, 2005a).

Ghana – Ankasa National Park (C. Belcastro, *vide* Larsen, 2005a); Atewa Range (C. Belcastro, *vide* Larsen, 2005a).

Nigeria – near Ikom (Larsen, 2005a).

Cameroon – Barombi Station (TL); Victoria (Karsch, 1895).

Gabon – Mondah (Vande weghe, 2010); Pongara (Vande weghe, 2010); Mpievie (Vande weghe, 2010); Fernan Vaz (Vande weghe, 2010); Iguela (Vande weghe, 2010); Mpassa, Bateke Plateau (Vande weghe, 2010).

Democratic Republic of Congo – Ituri Forest (Ducarme, 2018).

Zambia – Lisombu River (Heath *et al.*, 2002); Hillwood (Congdon & Bampton, unpublished 2003; male illustrated above); Zambezi Rapids (A. Gardiner).

Habitat: Forest.

Habits: An extremely rare butterfly (Larsen, 2005a). Individuals settle with the wings held flat, sometimes under overhanging rocks (Belcastro, *vide* Larsen, 2005a).

Early stages: Nothing published.

Larval food: Nothing published.