

Genus *Cerautola* Libert, 1999 Angled Flashes

In: Libert, 1999. *Révision des Epitola (l.s.)*: 41 (219 pp.).

Type-species: *Epitola ceraunia* Hewitson, 1873, by original designation [*In*: Libert, 1999. *Révision des Epitola (l.s.)*: 41 (219 pp.).]

= *Argyrotola* Libert, 1999. *In*: Libert, 1999. *Révision des Epitola (l.s.)*: 138 (219 pp.).

Type-species: *Epitola subargentea* Jackson, 1964, by original designation. Erected as a subgenus of *Geritola* Libert, 1999. Synonymized with *Cerautola* Libert, 1999 by Bouyer, 2013.

Cerautola (Angled Flashes) is a purely Afrotropical genus containing 15 species.

Phylogenetic hypothesis for Genus *Cerautola*

(Libert, 2020: 32)

C. cripsi complex

C. richardsoni, *C. mittoni*, *C. cripsi*, *C. fisheri*, *C. delassisei*

C. semibrunnea

C. subargentea

C. crowleyi

C. legeri

C. ceraunia

C. miranda complex

C. miranda, *C. josiana*, *C. vidua*, *C. cuypersi*

C. adlphofriderici



Cerautola species. Male. Left – upperside; right – underside.
Mabira Forest, Uganda. 17 April 2010. P. Ward.
Images M. C. Williams ex P. Ward collection.

****Cerautola richardsoni* Collins & Libert, 2015**

Cerautola richardsoni Collins & Libert, 2015. *Metamorphosis* **26**: 47 (45-50).

Type locality: Cameroon: Holotype (male): Koutaba, south of Foumban, Western Cameroon, v.2014 (ABRI leg.); Bold: MLIB-1679. Allotype (female): Koutaba, south of Foumban, Western Cameroon, v.2014 (ABRI leg.). Holotype and Allotype in the ABRI, Nairobi.

Etymology: Named for Ian Richardson, in recognition of his work on Afrotropical butterflies.

Distribution: Cameroon.

Specific localities:

Cameroon – Koutaba (TL).

Early stages: Nothing published.

Larval food: Nothing published.

****Cerautola mittoni* (Jackson, 1964)**

Hewitsonia mittoni Jackson, 1964. *Bulletin of the British Museum (Natural History)* (Entomology) **15**: 77 (59-80).

Hewitsonia mittoni Jackson, 1964. Ackery *et al.*, 1995: 533.

Synonym of *Cerautola cripsii* (Stoneham, 1933). Libert, 1999: 53.

Cerautola mittoni (Jackson, 1964). Bouyer, 2013 **stat. rev.**

Type locality: Uganda: “Toro, Bwamba, ix.1961, N. Mitton”. Holotype (male) in the NHM, London.

Distribution: Democratic Republic of Congo, Uganda.

Specific localities:

Democratic Republic of Congo – Lume, North Kivu (Libert & Collins, 2015); Mambungu (Libert & Collins, 2015); Maliva (Libert & Collins, 2015); Kasuo (Libert & Collins, 2015); Kanyatsi (Libert & Collins, 2015); Semuliki Valley (Ducarme, 2018); Mt Mitumba (Ducarme, 2018).

Uganda – Toro, Bwamba (TL); Semuliki N.P. (Forbes, 2018).

Early stages: Nothing published.

Larval food: Nothing published.

****Cerautola cripsii* (Stoneham, 1933)**

Hewitsonia cripsii Stoneham, 1933. *Bulletin of the Stoneham Museum* (17): [1] ([3 pp.]).

Cerautola cripsii (Stoneham, 1933). Libert, 1999 **comb. nov.**

Cerautola cripsii Stoneham, 1934. d’Abrera, 2009: 670. [date of authorship erroneous]



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



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

Type locality: Kenya: “Soy, Kenya Colony”. The holotype, purportedly a female, which is housed in the National Museum, Nairobi was examined by Larsen who determined that it is a male (Larsen, 1991c: 172). Neallotype (female): “Busia, Uganda, xi.1937, (T.H.E. Jackson), National Museum of Kenya, Nairobi (Libert & Collins, 2015).

Distribution: Cameroon (north), Uganda (east), Kenya (west) (Libert, 1999).

Habitat: Forest.

Early stages:

Jackson, 1947: 44 [Busia, eastern Uganda].

“**Egg.** Not known. **Larva.** On the bark of trees, usually in fairly open country. Although *Crematogaster* ants are always present, they do not appear to attend the larvae. The food is thought to be lichens. Exactly resembles the larva of the common lymantriid moth, *Naroma signifera* Walker, only lacking the dorsal tufts of this insect. Found among the ant-runs on the tree trunks in company with the lymantriid. Anteriorly broader than the *Naroma*. Collar whitish green, followed by a black band, a broad whitish band and another black one; segments 6 to 9 white, 10 black, anal segments white; an entire lateral fringe of tufts of hair. Length 25 mm. **Pupa.** A wonderful example of procrypsis, resembling exactly the common species of lichen among which it is placed. This lichen, occurring on the trunks of most trees, is foliaceous and pale green, covering all the irregularities of the bark, and having rounded, scalloped, exterior margins; occasionally with outgrowths of black, spiny spores. Pupa with dorsal region pale green with a central thoracic and abdominal row of a few black spines resembling the lichen spores. Lateral margins scalloped. Shape similar to that of *Hewitsonia kirbyi intermedia* J. & T. Thorax domed; collar shovel-shaped but bluntly bilobed; abdominal segments broad with a dorsal median ridge and scalloped edges. The head-case is carried ventrally. The wing-cases curve up to meet the green dorsal surface at its scalloped edge; they are coloured brown and black like a piece of the curled up undersurface of the lichen. Just before emergence the pale green colour turns grey, but the two lobes of the collar remain green, forming by contrast a striking resemblance to a pair of staring eyes. Length 20 mm, width 8 mm. Only females were bred. These differ from the nominotypical *crippsi*, described from Soy, Kenya, in having an additional white spot in area 2 of the fore-wing.”

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

Larval food:

Cyanobacteria and lichen on trees [Congdon *et al.*, 2017; Mt Rangwe, Kenya].

Cerautola crippsi crippsi (Stoneham, 1933)

Hewitsonia crippsi Stoneham, 1933. *Bulletin of the Stoneham Museum* (17): [1] ([3 pp.]).

Cerautola crippsi (Stoneham, 1933). Libert, 1999 **comb. nov.**

Cerautola crippsi Stoneham, 1934. d’Abreu, 2009: 670. [date of authorship erroneous]

Type locality: Kenya: “Soy, Kenya Colony”. The holotype, purportedly a female, which is housed in the National Museum, Nairobi was examined by Larsen who determined that it is a male (Larsen, 1991c: 172).

Etymology: Named after Teresa Di Micco de Santo, who has helped enormously as a volunteer at ABRI in recent years (Libert & Collins, 2015).

Distribution: Uganda (east), Kenya (west) (Libert, 1999).

Specific localities:

Uganda – Busia (Jackson, 1947); Bwamba, Toro (Jackson, 1964).

Kenya – Soy in the Cherangani Hills (TL); Rangwe Mountain, 1640 m, near Sindo (Libert & Collins, 2015); Kakamega (Libert & Collins, 2015).

Cerautola crippsi teresae Libert, 2015

Cerautola crippsi teresae Libert, 2015. *Metamorphosis* **26**: 46 (45-50).

Type locality: Cameroon: Wak, north of Ngaoundere, x.2006 (ABRI leg.). The holotype (male) is in ABRI, Nairobi.

Diagnosis: Differs from the nominate subspecies in that the white spot in space 3 of the forewing upper side is always absent in *teresae* (in the nominate subspecies it is present in 50% of individuals) (Libert & Collins, 2015).

Distribution: Cameroon (north).

Specific localities:

Cameroon – Wak (TL).

**Cerautola fisheri* Libert & Collins, 1999

Cerautola (Cerautola) fisheri Libert & Collins, 1999. *In*: Libert, 1999. *Révision des Epitola (l.s.)*: 54 (219 pp.).

Cerautola fisheri Libert & Collins, 1999. d'Abreu, 2009: 670.



Cerautola fisheri. Male. Left – upperside; right – underside.
Lumangwe Falls, northern Zambia. 10 April 2005. A. Gardiner.
Images M. Williams ex Gardiner Collection.



Cerautola fisheri. Female. Left – upperside; right – underside.
Mundwigi Plain, Mwinilunga district, Zambia. 1 April 2003. A. Gardiner.
Images M. Williams ex Gardiner Collection.

Type locality: Zambia: Holotype (male): Mrombwe stream, Mkushi, Iromi Hill, Zambia, 7.v.1979 (S. Fisher). Allotype (female): Mundwiji plain, 23.iii.1981 (A.J. Gardiner). Holotype in ABRI, Naironi. Allotype in Coll. Gardiner, Harare, Zimbabwe.

Distribution: Zambia (Libert, 1999).

Specific localities:

Zambia – Iromi Hill, Mkushi (TL); Mundwiji Plain (Heath *et al.*, 2002; male and female illustrated above); Shiwa Ngandu (Heath *et al.*, 2002); Kasamba Bay (Libert & Collins, 2015); Lake Kasaba (Libert & Collins, 2015); Mporokoso (Libert & Collins, 2015).

Early stages:

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

Larval food:

Algae, foliate lichen [Congdon & Bampton *in* Heath *et al.*, 2002].

Cyanobacteria and lichen on trees [Congdon *et al.*, 2017; Mundwiji Plains, Zambia].

**Cerautola delassisei* Bouyer, 2013

Cerautola delassisei Bouyer, 2013. *Lambillionea* **113**: 187 (186-189).



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

Type locality: Cameroon: “Ebogo, VIII – 3013 (A. Delassise) in coll. T. Bouyer”. Holotype (female) in the Thiery Bouyer Collection.

Distribution: Cameroon.

Specific localities:

Cameroon – Ebogo (TL); Mintom (Libert & Collins, 2015); Dja River (Libert & Collins, 2015).

Early stages: Nothing published.

Larval food: Nothing published.

**Cerautola semibrunnea* (Bethune-Baker, 1916)

Semibrown Epitola

Epitola crowleyi var. *semibrunnea* Bethune-Baker, 1916. *Annals and Magazine of Natural History* (8) **17**: 378 (378-385).

Cerautola semibrunnea (Bethune-Baker, 1916). Libert, 1999 **comb. nov.**

Cerautola semibrunnea Bethune-Baker, 1916. d’Abrera, 2009: 670.



Cerautola semibrunnea semibrunnea. Male. Left – upperside; right – underside.
Mabira Forest, Uganda. 5 April 2010. P. Ward.
Images M. C. Williams ex P. Ward collection.



Cerautola semibrunnea semibrunnea. Female. Left – upperside; right – underside.
Mabira Forest, Uganda. 3 April 2010. P. Ward.
Images M. C. Williams ex P. Ward collection.

Type locality: Cameroon: “Cameroons”.

Distribution: Nigeria, Cameroon, Central African Republic, Democratic Republic of Congo, Uganda, Tanzania.

Habitat: Forest.

Habits: The species is tied to individual ant-trees (Larsen, 2005a).

Early stages: Nothing published.

Larval food: Nothing published.

Cerautola semibrunnea semibrunnea (Bethune-Baker, 1916)

Epitola crowleyi var. *semibrunnea* Bethune-Baker, 1916. *Annals and Magazine of Natural History* (8) 17: 378 (378-385).
Cerautola semibrunnea (Bethune-Baker, 1916). Libert, 1999 **comb. nov.**



Cerautola semibrunnea semibrunnea. Male. Left – upperside; right – underside.
Mabira Forest, Uganda. 5 April 2010. P. Ward.
Images M. C. Williams ex P. Ward collection.



Cerautola semibrunnea semibrunnea. Female. Left – upperside; right – underside.
Mabira Forest, Uganda. 3 April 2010. P. Ward.
Images M. C. Williams ex P. Ward collection.

Type locality: Cameroon: “Cameroons”.

Distribution: Nigeria (Cross River loop), Cameroon, Central African Republic.

Specific localities:

Nigeria – Oban Hills (D. Knoop, *vide* Larsen (2005a).

Cameroon – Ebogo (Libert, 2020); Yaunde (Libert, 2020); Somaloma near Dja (Libert, 2020).

Central African Republic – Bangui (Libert, 2020).

Cerautola semibrunnea ammon (Joicey & Talbot, 1921)

Epitola ammon Joicey & Talbot, 1921. *Bulletin of the Hill Museum, Witley* 1: 83 (40-166).

Synonym of *Epitola semibrunnea* (Bethune-Baker, 1916). Ackery *et al.*, 1995.

Cerautola semibrunnea ammon (Joicey & Talbot, 1921). Libert, 2020: 34. **Stat. rev.**

Type locality: [Democratic Republic of Congo]: “Penghe, North bank Ituri River”.

Distribution: Democratic Republic of Congo, Uganda.

Specific localities:

Democratic Republic of Congo – Penghe, Ituri River (TL); Ituri Forest (Ducarme, 2018); Mt Mitumba (Ducarme, 2018); Kisangani (Libert, 2020); Epulu-RFO (Libert, 2020); Muleke (Libert, 2020); Mapimbi (Libert, 2020); Pateka (Libert, 2020); Mamove (Libert, 2020).

Uganda – Mongiro (Libert, 2020).

Cerautola semibrunnea bamptoni Libert & Collins, 1999

Cerautola (*Cerautola*) *semibrunnea bamptoni* Libert & Collins, 1999. *In*: Libert, 1999. *Révision des Epitola (l.s.)*: 44 (219 pp.).

Type locality: Tanzania: “Kere Hill, Minziro for., Bukoba R., 1250 m, NW Tanzanie”.

Distribution: Uganda, Tanzania (north-west).

Specific localities:

Uganda – Mabira Forest (P. Ward, *vide* Libert, 2020).

Tanzania – Kere Hill, Minziro Forest (common) (TL; Congdon & Collins, 1998).

**Cerautola subargentea* (Jackson, 1965)

Silvery Epitola

Epitola subargentea Jackson, 1965. *Annals and Magazine of Natural History* (13) 7: 698 (697-700).

Geritola subargentea (Jackson, 1965). Libert, 1999 **comb. nov.**

Geritola subargentea Jackson, 1964. d’Abrera, 2009: 678. [date of authorship erroneous].

Cerautola subargentea (Jackson, 1965). Bouyer, 2013 **comb. nov.**

Type locality: Uganda: “Bwamba, Mongiro”.

Distribution: Liberia, Ivory Coast, Cameroon, Central African Republic, Democratic Republic of Congo, Uganda, Tanzania.

Habitat: Forest.

Early stages: Nothing published.

Larval food: Nothing published.

Cerautola subargentea subargentea (Jackson, 1965)

Epitola subargentea Jackson, 1965. *Annals and Magazine of Natural History* (13) 7: 698 (697-700).

Geritola subargentea (Jackson, 1965). Libert, 1999 **comb. nov.**

Geritola subargentea Jackson, 1964. d’Abrera, 2009: 678. [date of authorship erroneous].

Cerautola subargentea subargentea (Jackson, 1965). Bouyer, 2013 **comb. nov.**

Type locality: Uganda: “Bwamba, Mongiro”.

Distribution: Democratic Republic of Congo, Uganda, Tanzania (north-west).

Specific localities:

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

Uganda – Mongiro Forest, Bwamba (TL); Semuliki N.P. (H. Selb, unpublished, 2016).

Tanzania – Kere Hill, Minziro Forest (rare) (Congdon & Collins, 1998).

Cerautola subargentea continua (Libert, 1999)

Geritola (Argyrotola) subargentea continua Libert, 1999. *In*: Libert, 1999. *Révision des Epitola (L.s.)*: 139 (219 pp.).

Geritola subargentea continua Libert, 1999. d’Abrera, 2009: 678.

Cerautola subargentea continua (Libert, 1999). Bouyer, 2013 **comb. nov.**

Type locality: Cameroon: “mont Fébé (Yaoundé), env. 1000 m”.

Distribution: Liberia, Ivory Coast (west), Cameroon, Central African Republic.

Specific localities:

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

Ivory Coast – Bossematie (H. Dall’Asta; single male at a moth light-trap, *vide* Larsen, 2005a).

Cameroon – Mount Febe, near Yaounde (TL; Libert, 1992, *vide* Larsen (2005a)).

**Cerautola crowleyi* (Sharpe, 1890)

Crowley’s Epitola

Epitola crowleyi Sharpe, 1890. *Annals and Magazine of Natural History* (6) 6: 106 (103-106).

Cerautola crowleyi (Sharpe, 1890). Libert, 1999 **comb. nov.**

Cerautola crowleyi Sharpe, 1890. d’Abrera, 2009: 670.



Cerautola crowleyi holochroma. Male. Left – upperside; right – underside.
Mubende, Uganda. Em. 28 April 2010. S. Szabolcs.

Type locality: Sierra Leone: “Sierra Leone”.

Distribution: Guinea-Bissau (Larsen, 2005a), Guinea, Sierra Leone, Liberia, Ivory Coast, Ghana, Togo, Nigeria, Cameroon, Gabon, Congo, Angola, Central African Republic, Democratic Republic of Congo, Uganda, Tanzania (Libert, 1999), Zambia.

Habitat: Forest. Mostly found on forest edges, in more open secondary forest and in savanna-forest mosaic (Safian & Larsen, 2009).

Habits: Males have been found low down, perching on tendrils of creepers or on palm leaves. They are also often found in the vicinity of ant-trees (Larsen, 2005a). A specimen was caught at light by Schultze (Aurivillius, 1905). When disturbed the flight of the males is very fast and erratic. Males display, in open areas, near ant-trees, or on treetops usually several metres above ground level. Hilltopping behaviour has been noted in this species. Display flights of males occurs between 12h30 and 14h00. When displaying, the flight-pattern is very characteristic; a fast and powerful lift is followed by a gliding swoop after a narrow-angled turn, within a square or polygonal “parade-ground”. Males often engage in both intra- and interspecific combat. Display perches are on dry twigs or creepers, where basking and displaying with open wings occurs. When not displaying, males are rather sedentary, remaining settled, sometimes low down, on dry palm leaves, twigs, creepers or tendrils, close to ant-trees. Females are most active in the early afternoon, between 13h00 and 15h30, when they may be seen investigating tree trunks for the carton nests of *Crematogaster* ants. The oviposition strategy is probably similar to that of *Cerautola miranda* (Safian & Larsen, 2009). Imagos eclose from their pupae between 10h30 and 12h00 and usually only fly on the following day (Safian & Larsen, 2009).

Early stages:

Safian & Larsen, 2009: 24 [Aburi, Ghana].

About 30 larvae of two species (*Cerautola crowleyi* and *Cerautola miranda*), and in various instars, in clusters of 4-12 larvae, were found on the bark of a giant Silk Cotton tree (*Ceiba pentandra*). They were 20-30 cm below and to the sides of a carton ant (*Crematogaster* species) nest, from 2.4 to 4 m above the ground. During the day the larvae remained motionless. Single ants often encountered the larvae but after coming in contact with the long lateral setae immediately left them. When the larvae were disturbed or collected, the ants remained unperturbed, indicating that alarm pheromone analogue was not released by the larvae. Larvae ‘grazed’ lichen off the bark, mostly at night. The pupal period for both species was about 10 days (Safian & Larsen, 2009).

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



Pupa of *Cerautola crowleyi crowleyi* ex Mountain Paradise, Ghana.
Image courtesy Andre Coetzer.

Larval food:

Foliolate lichen [Congdon & Bampton, unpublished 2003; Lisombo Stream, Zambia].

Cyanobacteria and lichen on trees [Congdon *et al.*, 2017; Minziro, Tanzania; for ssp. *congdoni*].

Associated ant:

Crematogaster species Lund (Formicidae) [Safian & Larsen, 2009: 22].

Cerautola crowleyi crowleyi (Sharpe, 1890)

Epitola crowleyi Sharpe, 1890. *Annals and Magazine of Natural History* (6) **6**: 106 (103-106).
Cerautola crowleyi (Sharpe, 1890). Libert, 1999 **comb. nov.**
Cerautola crowleyi crowleyi Sharpe, 1890. d'Abbrera, 2009: 670.

Type locality: Sierra Leone: “Sierra Leone”.

Distribution: Guinea-Bissau (Larsen, 2005), Guinea, Sierra Leone, Liberia, Ivory Coast, Ghana, Togo, Nigeria (west).

Specific localities:

Guinea-Bissau – Buba (=Bura) (Libert, 2020).

Guinea – Conakry (Libert, 2020).

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

Ghana – Aburi Botanical Gardens [5°51'10.68"N, 0°10'28.49"W] (Safian & Larsen, 2009).

hewitsoni Staudinger, 1889 (as sp. of *Epitola*). *Entomologische Nachrichten. Dresden* **15**: 178 (176-180). Invalid; junior primary homonym of *Epitola hewitsoni* Mabille, 1877 [Lycaenidae]. Sierra Leone: “Sierra Leone”.

Cerautola crowleyi leucographa Libert, 1999

Cerautola (Cerautola) crowleyi leucographa Libert, 1999. *In*: Libert, 1999. *Révision des Epitola (l.s.)*: 48 (219 pp.).
Cerautola crowleyi leucographa Libert, 1999. d'Abbrera, 2009: 670.

Type locality: Cameroon: “Yaoundé, mont Fébé (env. 1000 m)”.

Distribution: Cameroon, Gabon, Congo, Angola (north), Democratic Republic of Congo (south-west).

Specific localities:

Cameroon – Mount Febe, Yaounde (TL).

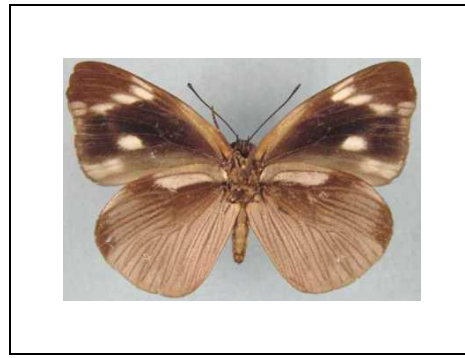
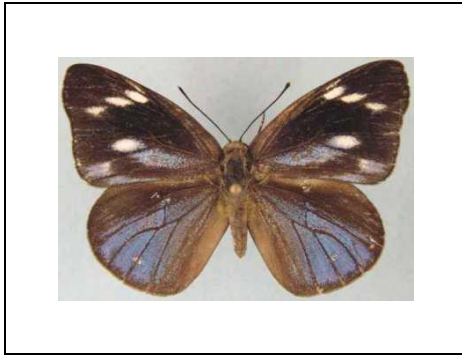
Gabon – Lope N.P. (station SEGC) (Vande weghe, 2010).

Cerautola crowleyi holochroma (Berger, 1981)

Epitola crowleyi holochroma Berger, 1981. *Les Papillons du Zaire* 194 (543 pp.). Bruxelles.
Cerautola crowleyi holochroma (Berger, 1981). Libert, 1999 **comb. nov.**
Cerautola crowleyi holochroma Berger, 1981. d'Abbrera, 2009: 670.



Cerautola crowleyi holochroma. Male. Left – upperside; right – underside.
Mubende, Uganda. Em. 28 April 2010. S. Szaboles.
Images M. C. Williams ex P. Ward collection.



Cerautola crowleyi holochroma. Female. Left – upperside; right – underside.
Wingspan: 52mm. Ikelenge, NW Zambia. 1.5.99. P. Walwande.
(African Butterfly Research Institute, Nairobi).

Type locality: [Democratic Republic of Congo]: “Lualaba, Kafakumbe”.

Distribution: Central African Republic, Democratic Republic of Congo (except south-west), Uganda, Zambia (north-west).

Specific localities:

Democratic Republic of Congo – Kafakumba, Lualaba (TL); Ituri Forest (Ducarme, 2018); Mt Mitumba (Ducarme, 2018); Biakatu (Libert, 2020); Mamove (Libert, 2020); Kanyatsi (Libert, 2020); Manzumbu (Libert, 2020); Maliva (Libert, 2020).

Uganda – Mabira Forest (Libert, 2020).

Zambia – Mundwiji Plain 40 km east of Mwinilunga (Heath *et al.*, 2002); Lisombo Stream (Heath *et al.*, 2002); Zambezi Rapids (Heath *et al.*, 2002; male illustrated above); Ikelenge (Heath *et al.*, 2002; female illustrated above); Hillwood (Congdon & Bampton, unpublished 2003).

Cerautola crowleyi congdoni Libert & Collins, 1999

Cerautola (Cerautola) crowleyi congdoni Libert & Collins, 1999. *In*: Libert, 1999. *Révision des Epitola (l.s.)*: 49 (219 pp.).
Cerautola crowleyi congdoni Libert & Collins, 1999. d’Abrera, 2009: 670.

Type locality: Tanzania: “Kere Hill, Minziro for., 1250 m, Bukoba, Tanzanie”.

Distribution: Tanzania (north-west) (Libert, 1999).

Specific localities:

Tanzania – Kere Hill, Minziro Forest (common) (Congdon & Collins, 1998).

**Cerautola legeri* Libert, 1999

St Leger’s Epitola

Cerautola (Cerautola) legeri Libert, 1999. *In*: Libert, 1999. *Révision des Epitola (l.s.)*: 50 (219 pp.).
Cerautola legeri Libert, 1999. d’Abrera, 2009: 670.



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



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

Type locality: Nigeria: “Abak, E. Nigeria”.

Distribution: Nigeria (east).

Specific localities:

Nigeria – Abak, west of the Oban River (TL); Acharu Forest, Ayangba, near Lokoja on the eastern side of the Niger (Jon Baker, *vide* Larsen (2005a).

Habitat: Forest.

Early stages: Nothing published.

Larval food: Nothing published.

****Cerautola ceraunia* (Hewitson, 1873)**

Silvery Epitola

Epitola ceraunia Hewitson, 1873. *Entomologist's Monthly Magazine* **10**: 149 (149-151).

Cerautola ceraunia (Hewitson, 1873). Libert, 1999 **comb. nov.**

Cerautola ceraunia Hewitson, 1879. d'Abrebra, 2009: 670. [date of authorship erroneous].



Cerautola ceraunia. Male. Left – upperside; right – underside.
Mabira Forest, Uganda. 31 August 2008. P. Ward.
Images M.C.Williams ex Dobson Collection.

Type locality: “West Africa”.

Distribution: Guinea Bissau, Guinea, Sierra Leone, Liberia, Ivory Coast, Ghana, Togo, Nigeria (south and Cross River loop), Cameroon, Gabon, Congo, Angola, Central African Republic, Democratic Republic of Congo, Uganda, Kenya, Tanzania (north-west), Zambia (north).

Specific localities:

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

Ghana – Kakum National Park (Larsen, 2005a); Bobiri Butterfly Sanctuary (Larsen *et al.*, 2007).

Nigeria – Oni Creek (Lamborn, 1914).

Gabon – Mikongo (Vande weghe, 2010); Waka (Vande weghe, 2010); Ekouyi (Vande weghe, 2010).

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

Uganda – Radio Hill, Mabira Forest (male illustrated above).

Tanzania – Kere Hill, Minziro Forest (common) (Congdon & Collins, 1998); Munene Forest (Congdon & Collins, 1998).

Habitat: Forest.

Habits: A fairly common epitola, usually found near ant-trees. It usually flies fast and high up (Larsen, 2005a). When disturbed the flight is very fast and erratic. Males display, in open areas, near ant-trees, or on treetops, usually several metres above ground level. Display flights of males occurs between 09h00 and 10h00. When displaying the flight-pattern is very characteristic; a fast and powerful lift is followed by a gliding swoop after a narrow-angled turn, within a square or polygonal “parade-ground”. Males often engage in both intra- and interspecific combat. Males have even been observed investigating shiny blue objects at ground level. Display perches are on dry twigs or creepers, where basking and displaying with open wings occurs. When not displaying males are rather sedentary, remaining settled, sometimes low down, on dry palm leaves, twigs, creepers or tendrils, close to ant-trees. Females are most active in the early afternoon, between 13h00 and 15h30, when they may be seen investigating tree trunks for the carton nests of *Crematogaster* ants (Larsen, 2005a). Females lay clusters of 60 to 80 eggs, high up the trunk, in the vicinity of ant nests (Safian & Larsen, 2009). Imagos eclose from their pupae between 10h30 and 12h00 and usually only fly on the following day (Safian & Larsen, 2009).

Flight period: Recorded in February by Lamborn, 1914.

Early stages:

Lamborn, 1914: 456 [Oni Camp, 110 km east of Lagos, Nigeria]

Seventeen pupae were found on the leaves of shrubs in close proximity to each other. *Crematogaster buchneri*, in numbers, were present on these shrubs. Pupae were mainly (15/17) on the upper surface of leaves and projected upwards at an angle of 45 degrees. One pupa was found on the underside of a leaf and one on a stem. The pupae all eclosed over a two day period, suggesting that the larvae belonged to a gregarious cohort.

Eltringham, 1921b: 474 [ex Lamborn, Oni, Nigeria].

“**Pupa.** (Plate XII, fig. 3). A very pale pupa with a few black markings, notably on the wing-cases and the dorsal and lateral regions. The smooth prominent tubercles, which in the dry specimens are orange-brown, form the most characteristic feature. From each of these projects a blunt spine. The greater part of the dorsal thoracic and abdominal areas sparsely set with very minute spines or setae. Pupa attached posteriorly to a leaf. The larval hairs combined with those of the posterior pupal segments are attached to the leaf in radiate formation. Length 15 mm.”

Safian & Larsen, 2009: 24 [near Kakum Forest, Ghana].

A cluster of larvae was found in the vicinity of a *Crematogaster* carton nest. These larvae were highly gregarious and grazed the bark “like a flock of sheep”. Larval clusters of up to 80 have been noted. Before pupating larvae descended the tree trunk and dispersed.

Larval food: Nothing published.

Associated ant:

Crematogaster buchneri Forel (Formicidae) [Lamborn, 1914; Nigeria].

Crematogaster species Lund (Formicidae) [Safian & Larsen, 2009: 22].

dewitzi Kirby, 1887 (as sp. of *Epitola*). *Annals and Magazine of Natural History* (5) **19**: 442 (441-445). Cameroon: “Cameroons”.

**Cerautola miranda* (Staudinger, 1889)

Wondrous Epitola

Epitola miranda Staudinger, 1889. *Entomologische Nachrichten. Dresden* **15**: 176 (176-180).

Cerautola miranda (Staudinger, 1889). Libert, 1999 **comb. nov.**

Cerautola miranda Staudinger, 1889. d’Abrera, 2009: 670.

Type locality: Sierra Leone: “Sierra Leone”.

Distribution: Guinea, Sierra Leone, Liberia, Ivory Coast, Ghana, Togo, Nigeria.

Habitat: Forest and forest edges. Mostly found on forest edges, in more open secondary forest and in savanna-forest mosaic (Safian & Larsen, 2009).

Habits: Associated with individual ant-trees (Larsen, 2005a). Adults have been noted feeding on the secretions of coccids (Farquharson, 1922). The species tends to stay high up, often settling on dead palm fronds, but may also be seen quite low down. Males appear to select perches from which they defend territories. The flight is fast and erratic (2005a). They frequent open places in and near forests, evidently requiring a fairly large display area (Larsen, 2005a). When disturbed the flight of the males is very fast and erratic. Males display, in open areas, near ant-trees, or on treetops usually several metres above ground level. Hilltopping behaviour has been noted in this species. Display flights of males occur between 11h00 and 12h00. When displaying the flight-pattern is very characteristic; a fast and powerful lift is followed by a gliding swoop after a narrow-angled turn, within a square or polygonal “parade-ground”. Males often engage in both intra- and interspecific combat. Display perches are on dry twigs or creepers, where basking and displaying with open wings occurs. When not displaying males are rather sedentary, remaining settled, sometimes low down, on dry palm leaves, twigs, creepers or tendrils, close to ant-trees. Females are most active in the early afternoon, between 13h00 and 15h30, when they may be seen investigating tree trunks for the carton nests of *Crematogaster* ants. Females often fly in a spiral up and down around the tree trunk. Eggs are laid singly between ant trails, 20 to 30 cm below a carton nest of the host ant. This is repeated three to five times before the female leaves to search for another tree. Mostly oviposition occurs low down, from ground level to 3 m up the trunk (Safian & Larsen, 2009). Imagos eclose from their pupae between 10h30 and 12h00 and usually only fly on the following day (Safian & Larsen, 2009).

Early stages:

Farquharson, 1922: 351 [Nigeria].

Larvae and pupae were found on the bark of *Alstonia congensis* Enfler (Apocynaceae).

Eltringham, 1922b: 475 [ex Lamborn, Nigeria].

“**Pupa.** I have not figured this pupa since it so closely resembles that of *E. ceraunia* (fig. 3) that a separate illustration seems unnecessary. It is attached by the terminal segments, which are themselves clothed with long white hairs, resting on a cushion formed from the old larval skin. The long axis of the pupa is at right angles to the plane of its support. The dark markings are less irregular than in *ceraunia*. The 2nd abdominal segment bears a black, bracket-shaped transverse streak. On lateral prominences of the abdominal segments are a few very small chitinaths, and from these prominences on the 2nd, 3rd and 4th segments, there arise long fine bristles, which instead of projecting, are curved around the wing-cases. This feature is not shared by the pupa of *ceraunia*. Length 15 mm.”

Safian & Larsen, 2009: 24 [Aburi, Ghana].

About 30 larvae of two species (*Cerautola crowleyi* and *Cerautola miranda*), and in various instars, in clusters of 4-12 larvae, were found on the bark of a giant Silk Cotton tree (*Ceiba pentandra*). They were 20-30 cm below and to the sides of a carton ant (*Crematogaster* species) nest, from 2.4 to 4 m above the ground. During the day the larvae remained motionless. Single ants often encountered the larvae but after coming in contact with the long lateral setae immediately left them. When the larvae were disturbed or collected the ants remained unperturbed, indicating that alarm pheromone analogue was not released by the larvae. Larvae ‘grazed’ lichen off the bark, mostly at night. The pupal period for both species was about 10 days.

Larval food: Nothing published.

Associated ant:

Crematogaster species Lund (Formicidae) [Safian & Larsen, 2009: 22].

Cerautola miranda miranda (Staudinger, 1889)

Epitola miranda Staudinger, 1889. *Entomologische Nachrichten. Dresden* **15**: 176 (176-180).

Cerautola miranda (Staudinger, 1889). Libert, 1999 **comb. nov.**

Cerautola miranda miranda Staudinger, 1889. d’Abrera, 2009: 670.

Type locality: Sierra Leone: “Sierra Leone”.

Distribution: Guinea, Sierra Leone, Liberia, Ivory Coast.

Specific localities:

Guinea – Fouta Djallon (Larsen, 2005a).

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

Ivory Coast – Bossematie (Libert, 2020).

Cerautola miranda ghanaensis Libert, 2020

Epitola miranda ghanaensis Libert, 2020. *Epitola l.s.*: mise à jour de la Révision (Lepidoptera, Lycaenidae); 24 (157 pp.; 15 plates). Published by the author.

Type locality: Ghana: Amedzofe, Volta, Ghana, VI 1998 (ABRI Leg.). Allotype (female): Amedzofe, Volta, Ghana, II 2006 (ABRI Leg.). Holotype (male) and allotype (female) in ABRI, Nairobi.

Distribution: Ghana, Togo, Nigeria (west).

Specific localities:

Ghana – Amedzofe (TL); Aburi Botanical Gardens [5°51'10.68"N, 0°10'28.49"W] (Safian & Larsen, 2009); Bobiri (Libert, 2020); Kakum (Libert, 2020); Bunso (Libert, 2020); Biakpa (Libert, 2020); Avatime (Libert, 2020); Ho (Libert, 2020); Kpandu (Libert, 2020); Lipke (Libert, 2020).

Togo – Bismarckburg.

Nigeria – near Lagos (Larsen, 2005a); Ibadan (Libert, 2020); Osogbo (Libert, 2020).

**Cerautola josiana*e Collins & Libert, 2020

*Cerautola josiana*e Libert, 2020. *Epitola l.s.*: mise à jour de la Révision (Lepidoptera, Lycaenidae); 42 (157 pp.; 15 plates). Published by the author.



*Cerautola josiana*e. Male. Left – upperside; right – underside.
Mabira Forest, Uganda. 5 June 2011. P. Ward.
Images M.C. Williams ex Ward Collection.



*Cerautola josiana*e. Female. Left – upperside; right – underside.
Lumangwe Falls, northern Zambia. 11 April 2005. A. Gardiner.

Type locality: Kenya: Rangwe Mtn, nr Sindo, 5000 ft., W. Kenya, X 2003 (ABRI Coll.). Allotype (male): Rangwe Mtn, nr Sindo, 5000 ft., W. Kenya, IX 2003 (ABRI Coll.). Holotype (female) and allotype (male) both in ABRI, Nairobi.

Etymology: Named for Josiane Goosens.

Distribution: Uganda (south-east), Kenya (west), Tanzania (north-west and west), Democratic Republic of Congo (south-east), Zambia (north-east).

Specific localities:

Uganda – Siroko River, Mt Elgon (Libert, 2020); Mabira (Libert, 2020); Buddu (Libert, 2020); Katera (Libert, 2020).

Kenya – Gwasi (Lake Victoria) (S.C. Collins, *vide* Larsen, 1991c; single specimen).

Tanzania – Ntakatta Forest (Mpanda) (Kielland, 1990d); Kemfu Forest, Kigoma (Kielland, 1990d); Kasye Forest, Kigoma (Kielland, 1990d); Minziro (Libert, 2020); Lubalizi Forest (Libert, 2020).

Democratic Republic of Congo – Lubudi (Libert, 2020)

Zambia – Shiwa Ngandu (Fisher, *vide* Heath *et al.*, 2002); Lake Kasaba (Libert, 2020).

Habitat: Forest and forest edges. In Tanzania *vidua* flies at altitudes from 800 to 1 600 metres (Kielland, 1990d).

Habits: This is a rare and localized species (Larsen, 1991c). Adults have often been observed settling on the shoots of climbers infested with aphids (Kielland, 1990d). The species tends to stay high up, often settling on dead palm fronds, but may also be seen quite low down. Males appear to select perches from which they defend territories. The flight is fast and erratic (Larsen, 1991c).

Early stages:

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

Larval food:

Cyanobacteria and lichens on trees [Congdon *et al.*, 2017; Minziro, Tanzania; as *vidua*].

Associated ant: Nothing published.

**Cerautola vidua* (Talbot, 1935)

Epitola vidua Talbot, 1935. *Entomologist's Monthly Magazine* 71: 75 (69-78, 115-127, 147-153).

Epitola miranda vidua Talbot, 1935. Kielland, 1990d.

Cerautola miranda vidua (Talbot, 1935). Libert, 1999; **comb. nov.**

Cerautola miranda vidua Talbot, 1935. d'Abbrera, 2009: 670.

Cerautola vidua (Talbot, 1935). Libert, 2020: 41; **stat. rev.**

Type locality: Uganda: “Sesse Islands, Lutokoba east of Bugalla, about 3,700 ft., at forest edge”.

Distribution: Nigeria (east), Cameroon, Gabon, Congo, Angola, Central African Republic, Democratic Republic of Congo, Uganda.

Habitat: Nothing published.

Habits: Nothing published.

Early stages: Nothing published.

Larval food: Nothing published.

Associated ant: Nothing published.

Cerautola vidua vidua (Talbot, 1935)

Epitola vidua Talbot, 1935. *Entomologist's Monthly Magazine* 71: 75 (69-78, 115-127, 147-153).

Epitola miranda vidua Talbot, 1935. Kielland, 1990d.

Cerautola miranda vidua (Talbot, 1935). Libert, 1999; **comb. nov.**

Cerautola miranda vidua Talbot, 1935. d'Abbrera, 2009: 670.

Cerautola vidua vidua (Talbot, 1935). Libert, 2020: 41; **stat. rev.**

Type locality: Uganda: “Sesse Islands, Lutokoba east of Bugalla, about 3,700 ft., at forest edge”.

Distribution: Democratic Republic of Congo, Uganda.

Specific localities:

Democratic Republic of Congo – Lume, Ruwenzori; Ituri Forest (Ducarme, 2018); Semuliki Valley (Ducarme, 2018); Mt Mitumba (Ducarme, 2018); Paulis (Libert, 2020); Katako-Kombe (Libert, 2020).

Uganda – Sesse Islands (TL); Bwamba (Libert, 2020); Kalinzu (Libert, 2020); Kayonza (Libert, 2020).

Cerautola vidua centralis Libert, 2020

Cerautola urania Libert, 2020. *Epitola l.s.*: mise à jour de la Révision (Lepidoptera, Lycaenidae); 24 (157 pp.; 15 plates).
Published by the author.

Type locality: Central African Republic: Boukoko (Bookoko), RCA, IX 1998 (S.C. Collins). Allotype (male): Boukoko, RCA, XI 1995 (S.C. Collins). Holotype (female) and allotype (male) both in ABRI, Nairobi.

Distribution: ?Nigeria (east), Cameroon, Gabon, Congo, Angola, Democratic Republic of Congo, Central African Republic.

Specific localities:

Cameroon – Mt Manengouba (Libert, 2020); Koutaba (Libert, 2020); Ebogo (Libert, 2020); Yaounde (Libert, 2020); Akonolinga (Libert, 2020); Bertoua (Libert, 2020); Dja (Libert, 2020); Mintom (Libert, 2020); Maan (Libert, 2020).

Gabon – Langoue (Vande weghe, 2010); Mouila (Libert, 2020).

Congo – Etoumbi (Libert, 2020); Kelle (Libert, 2020); Tchissanga (Libert, 2020); Foulakari River (Libert, 2020).

Angola – Buco Zau, Cabinda (Libert, 2020).

Democratic Republic of Congo – Kinshasa (Libert, 2020).

Central African Republic – Bangui (Libert, 2020).

**Cerautola cuypersi* Libert & Collins, 2015

Cerautola cuypersi Libert & Collins, 2015. *Metamorphosis* 26: 48 (45-50).

Type locality: Democratic Republic of Congo: Holotype (female): Mampu, Bateke plateau (4°20'S, 16°18'E), western Democratic Republic of Congo, 30 III 2008 (F. Cuypers). Holotype in the M.R.A.C., Tervuren, Belgium. Known only from the holotype.

Etymology: Named for Frank Cuypers, who collected the holotype on an old, ant-infested citrus tree in the middle of a large *Acacia auriculiformis* plantation. He also captured two males of *Cerautola crowleyi holochroma* Libert, 1999.

Distribution: Democratic Republic of Congo.

Specific localities:

Democratic Republic of Congo – Mampu (4°20'S, 16°18'E) (TL).

Early stages: Nothing published.

Larval food: Nothing published.

**Cerautola adolphifrideric* (Schultze, 1911)

Epitola adolphi-friderici Schultze, 1911. *Deutsche Entomologische Zeitschrift, Iris* 25: 95 (95-96).

Epitola adolphifrideric (Schultze, 1911). Ackery *et al.*, 1995: 520.

Cerautola adolphifrideric (Schultze, 1911). Libert, 1999 **comb. nov.**

Cerautola adolphifrideric Schultze, 1911. d'Abreva, 2009: 670.

Type locality: Cameroon: “Yakaduma”.

Distribution: Cameroon, Democratic Republic of Congo (Libert, 1999).

Specific localities:

Cameroon – Yakaduma (TL).

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

Early stages: Nothing published.

Larval food: Nothing published.