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## Description of two new species of the groundstreak genus *Arzecla* Duarte et Robbins, 2010 (Lepidoptera: Lycaenidae: Theclinae: Eumaeini) from Colombia

### Описание двух новых видов рода *Arzecla* Duarte et Robbins, 2010 (Lepidoptera: Lycaenidae: Theclinae: Eumaeini) из Колумбии

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**Key words:** Lycaenidae, *Arzecla*, Andes, Transandean species, biogeography, check-list, identification key, taxonomy.

**Ключевые слова:** Lycaenidae, *Arzecla*, Анды, трансандийские виды, биогеография, чек-лист, определительная таблица, таксономия.

**Abstract.** Two species of *Arzecla* Duarte et Robbins, 2010 are described from Colombia, namely: *Arzecla straboris* Bálint, **sp. n.** (type locality: El Aguila, Manizales, Caldas), and *Arzecla straelena* Bálint, **sp. n.** (type locality: Cerro Ingrumá, Riosucio, Caldas), both on the basis of a single male specimen. New species possess a combination of characters, unique in the genus, hence they are easy to identify. A checklist with biogeographic and country indications and a key for identification based on wing characters for all described *Arzecla* species is provided. Specimens examined for comparative purpose are listed as an Appendix. Eleven figures.

**Резюме.** Два вида рода *Arzecla* Duarte et Robbins, 2010 описаны из Колумбии: *Arzecla straboris* Bálint, **sp. n.** (типовое местонахождение: El Aguila, Manizales, Caldas) и *Arzecla straelena* Bálint, **sp. n.** (типовое местонахождение: Cerro Ingrumá, Riosucio, Caldas), – каждый по одному самцу. Виды обладают сочетанием уникальных признаков, поэтому их легко идентифицировать. Составлен чек-лист с указанием распространения по странам, определительная таблица на основе признаков крыльев для всех описанных видов *Arzecla*, а также список видов использованного сравнительного материала.

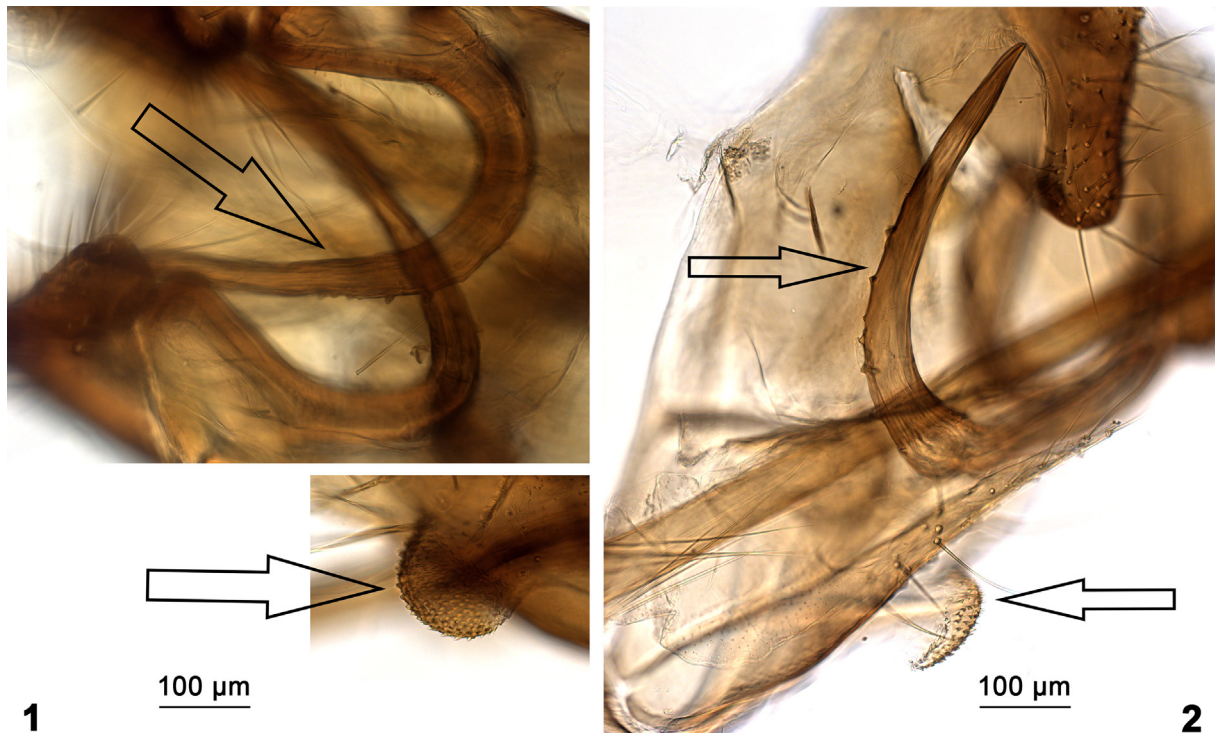
### Introduction

The purpose of this paper is to contribute new data to the knowledge of Lycaenidae taxonomy in the light of recent publications. In this case it is for the groundstreak genus *Arzecla* [Warren et al., 2016], established in the subtribe Calycopidina by Duarte and Robbins [2010] for ten formerly described species [Warren et al., 2016]. All *Arzecla* species with conspicuous alternating light and dark

bands on the ventral wingsurfaces of both sexes have long been treated as closely related to each other [Draudt, 1920; d’Abrera, 1995], but Duarte and Robbins placed further species in the genus lacking the mentioned conspicuous wing trait. From other calycopidine hairstreaks *Arzecla* can be discriminated on the basis of two characters provided by the male genitalia. Wing pattern sexual dimorphism is minimal throughout the genus, grossly contrasting some other calycopidines [Duarte, Robbins, 2010; Costa et al., 2019]. In the followings two species with Colombian type localities will be described in *Arzecla*. Both of the new species possess the conspicuous ventral colouration and pattern typical for *Arzecla*, plus the male genitalia characters recorded by Duarte and Robbins [2010]. Consequently they can be readily classified.

More than fifty *Arzecla* specimens deposited in the Hungarian Natural History Museum (HNHM, Budapest) were studied for comparative purposes. These are listed in an Appendix. Type material was examined personally in the Natural History Museum (London, UK) [Bálint, 2005], and in the Muséum National d’Histoire Naturelle (MNHN, Paris, France) [Faynel, Bálint, 2004]; plus the Lycaenidae type documentation in the HNHM has been also consulted (for the Smithsonian Museum of Natural History, Washington DC, USA; SMNH).

Specimens and internal structures were examined via traditional methods, using binocular stereo microscope supplemented by a digital camera (OLYMPUS 70SZX12 and DP70). Necessary specimens were dissected and databased in the HNHM. The preparations are being kept with the relevant specimens in plastic microvials filled with glycerine. Optical imaging of the genitalia structures under large magnification was carried out using an Axio Imager A1 microscope (Carl Zeiss AG, Jena, Germany)



Figs 1–2. Male generic characters of *Arzecla*. Upper arrows indicate the genitalia gnathos and lower arrows the vinculum-tegumen process, both with teeth. Рис. 1–2. Родовые признаки самцов *Arzecla*. Верхние стрелки указывают на гнатос, нижние стрелки – на винкулярно-тегуменный отросток, оба с зубцами.

1 – *A. straboris* Bálint, sp. n.; 2 – *A. straelena* Bálint, sp. n.

using reflected light in the Institute of Technical Physics and Materials Science (Budapest, Hungary).

Terminology used in descriptive text is compatible with previous papers on calycopidine eumaeines [Costa et al., 2018, 2019; Bálint, 2019]. A checklist for all the *Arzecla* species with their known distribution and biogeographical indications (according to Brown [1993]) is given. A key for identification based on wing characters for all the *Arzecla* species is also provided.

The paper is written for the memory of late Dr Boris Stradomsky (1959–2019). Together with his wife Elena A. Fomina they contributed significantly to the knowledge of the family Lycaenidae. The new species are being described in the followings are dedicated to and named after them.

### Classification and generic placement

Both of the species being described belong to the tribe Eumaeini because they possess the following three diagnostic characters: (1) ten forewing veins; (2) greyhound shaped male genitalia in lateral aspect and without sclerotized juxta; (3) male foretarsus fused and stubby tipped, used for walking [Eliot, 1973]. Both species are placed in the genus *Arzecla* (type species: *Thecla arza* Hewitson, 1874, by original designation of Duarte and Robbins [2010] of Calycopidina (males without androconia), because there are two or more rows of small teeth on the male genitalia gnathos [Duarte, Robbins, 2010: fig. 10] and the posterior ventro-lateral edge of the vinculum-tegumen has a process with teeth on the ventral surface [Duarte, Robbins, 2010: fig. 5] (Figs 1, 2).

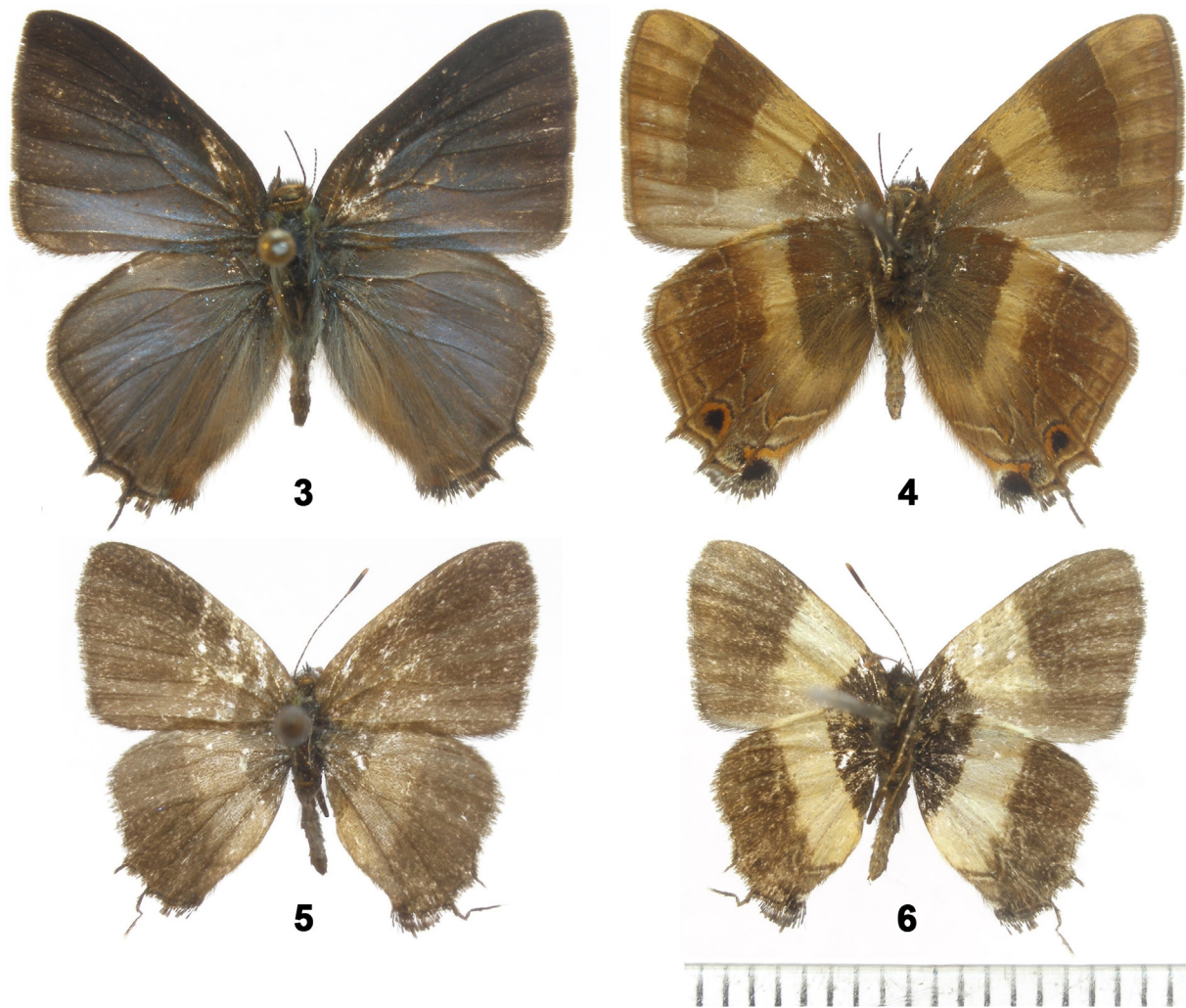
### *Arzecla straboris* Bálint, sp. n.

(Figs 1, 3, 4, 17)

**Material.** Holotype, ♂ (HNHM): in moderate condition (half of both antennae missing, abdomen dissected: Bálint genitalia preparation no. 1523), set dorsally, with the printed label "COLOMBIA, Caldas, El Aquila [= Aguila], Manizales, 1800 m, March 22, 1996, Julián Salazar leg."

**Diagnosis.** Similar to congeners with brown dorsal wingsurface in pointed forewing shape and underside pattern with brown basal and postdiscal area divided by a yellow median-submedian band, but male dorsal wingsurface dull metallic blue as in *A. albolineata* (Lathy, 1936) (type locality: Rio Aguatal, Colombia) (Figs 7–10, 18) what is the single described congener with blue dorsal wingsurface. However *A. albolineata* ventral wingsurfaces are not striped but unicolourous in both sexes.

**Description.** Body: frontoclypeus with erecting black hairs, labial palp black and extremely short, eyes brown, large and hairy, parocular area and scape light brown, thorax and abdomen black, femurs hairy. Wings. Forewing costal length measured from wing base to apex 12 mm (holotype); hindwing with short filamentous black tail at vein CuA1 terminus, and with a longer tail at vein CuA2 terminus; dorsal forewing surface muted blue with 2–3 mm wide black costal and outer marginal band, dorsal hindwing surface also muted blue with thin (1 mm) greyish marginal band, tornal area orange; fringes grey in both wings; forewing ventral surface basal and postmedian area warm brown, median area warm yellow, submarginal area lighter brown having a narrow short line in the subapical area to vein M1, inner margin area grey; ventral hindwing surface colouration and pattern similar to those of forewing, but with much wider postmedian band, lighter submarginal area narrower, supplemented with the typical "W" shaped median-postmedian hairstreak pattern and the



Figs 3–6. *Arzecla* specimens from Colombia (left column – dorsal view, right column – ventral view).

3–4 – *A. straboris* Bálint, **sp. n.**, male, holotype; 5–6 – *A. straelena* Bálint, **sp. n.**, male, holotype. Scale 1 mm.

Рис. 3–6. Виды *Arzecla* из Колумбии (левая колонка – вид сверху, правая колонка – вид снизу).

3–4 – *A. straboris* Bálint, **sp. n.**, самец, голотип; 5–6 – *A. straelena* Bálint, **sp. n.**, самец, голотип. Масштаб делений 1 мм.

“Thecla-spot” in cell CuA1; tornus black with orange antemarginal scaling. Genitalia typical eumaeine with brush organ (hairs short and densely arranged, fused to tegumen dorsally), large uncus with heavily sclerotized anal margin, ganthos also heavily sclerotized and slightly curved with pointed apices, valva short with bulbous apex, aedeagus almost 3 times longer than valval length, apex with long and slender cornutus, terminus widely open. Female not known.

**Bionomics.** Geographical: known only from the type locality: El Aguila, Manizales, Caldas, Columbia (Fig. 22). Spatial: the holotype specimen was collected at 1800 m. Temporal: the holotype specimen was collected in March.

**Etymology.** The species group name “straboris” is feminine noun. It is an arbitrary combination of syllables “stra” and “boris” taken from the name of the late Boris Stradomsky, who was an excellent researcher of Lycaenidae (cf. [Stradomsky, 2016]). The species is dedicated to him.

**Remarks.** In the genus the male dorsal blue colouration is shared only by the species *A. albolineata* and *A. staboris*. However, the underside pattern and colouration of these species are qualitatively different (see diagnosis). It is also worth to mention, that the blue

congener *A. albolineata* male genitalia has a distinctively shaped valva and aedeagus terminus, lacking brush organ (Fig. 18). All the other known *Arzecla* species are dorsally brown or rufous brown. The ventral wing pattern and colouration of *A. straboris* resembles the brown species sympatric Panamerican *A. arza* and Transandean *A. tarpa* (Godman et Salvin, 1887). The similarity is especially distinctive in the case of *A. arza* as both species have “single banded” ventral forewing surfaces. However in the hindwing ventral surface of *A. arza* there is a light brownish white or yellow coloured median band what fuses distally with the postmedian pattern and reaches the inner margin (this band is yellow in *A. straboris* **sp. n.** and separated by an area of dark scales from the postmedian pattern and does not reach the inner margin) (Figs 3, 4, 11, 12). The genitalia of *A. arza* is also distinctive with no brush organ and a lobe-like tegumen-vinculum process with rounded ventrolateral edge (*A. straboris* **sp. n.** has brush organ and the process is not lobe-like) (Figs 17, 19). According to the website of “Butterflies of America” [Warren et al., 2016] *A. arza* has a Panamerican distribution from Mexico to



Figs 7–12. *Arzecla* species for comparison from Colombia (left column – dorsal view, right column – ventral view).  
 7–10 – *A. albolineta* (Lathy, 1936) specimens from Colombia: 7–8 – male (MNHN holotype: “Rio Aguatal”), 9–10 – female (HNHM voucher: Agaucatal, Valle); 11–12 – *A. arza* (Hewitson, 1874), male (HNHM voucher: Manizales, Caldas). Scale 1 mm.

Рис. 7–12. Колумбийские виды *Arzecla* для сравнения (левая колонка – вид сверху, правая колонка – вид снизу).  
 7–10 – *A. albolineta* (Lathy, 1936), экземпляр из Колумбии: 7–8 – самец (MNHN, голотип: “Rio Aguatal”), 9–10 – самка (коллекция HNHM: Agaucatal, Valle); 11–12 – *A. arza* (Hewitson, 1874), самец (коллекция HNHM: Manizales, Caldas). Масштаб делений 1 мм.



Figs 13–16. *Arzecla taminella* (Schaus, 1902), specimens from Brazil (left column – dorsal view, right column – ventral view).

13–14 – female (SMNH syntype: “Castro, Paraná”); 15–16 – male (HNHM voucher: Santa Catarina). Scale 1 mm.

Рис. 13–16. *Arzecla taminella* (Schaus, 1902), экземпляры из Бразилии (левая колонка – вид сверху, правая колонка – вид снизу). 13–14 – самка (синтип из SMNH: “Castro, Paraná”); 15–16 – самец (коллекция HNHM: Santa Catarina). Масштаб делений 1 мм.

Brazil. In the HNHM material there is a pair from Brazil, whose female has dorsal blue colouration (see Appendix). The female polymorphism regarding dorsal wing structural colouration in Lycaenidae can be easily influenced by environmental variables, whilst the male colouration is highly stress resistant [Piszter et al., 2019]. Consequently the dorsal wing surface colouration in *Arzecla* must be also a good taxonomic character as this has been demonstrated also for other Neotropical lycaenids [Bálint et al., 2008, 2019]. Nevertheless we are of the opinion that *A. arza* sensu auctorum most probably hides at least two hitherto unrecognized biological species. This must be discussed by a separate paper focusing to this topic.

*Arzecla straelena* Bálint, **sp. n.**  
(Figs 2, 5, 6, 20)

**Material.** Holotype, ♂ (HNHM): in moderate condition (left antenna missing, wings slightly worn; abdomen dissected: Bálint genitalia preparation no. 1522), set dorsally, with the printed label “COLOMBIA, cerro Ingrumá, Mpio de Riosucio, Caldas, 2270 m, 10.VII.1994. leg. J. Salazar, HNHM via K. Johnson”.

**Diagnosis.** Similar to congeners with brown dorsal wingsurface in pointed forewing shape and underside

pattern with brown basal and postdiscal area divided by a yellow median-submedian band. Superficially the closest species is *A. taminella* (Schaus, 1902) (type locality: Castro, Parana, Brazil; Figs 13, 14), but *A. straelena* **sp. n.** lacks orange scaling entirely (*A. taminella* hindwing dorsal wingsurface is orange scaled in tornal area, as well as the ventral hindwing “Thecla-spot” and the submargin without pattern (*A. taminella* is delicately patterned in the submarginal area of both wings; Figs 15, 16). Another feature is that the submedian yellow band and the postmedian pattern is not divided by a wide dark area, which trait typifies *A. taminella*.

**Description.** Body: frontoclypeus with erecting black hairs, labial palp black and extremely short, eyes brown, large and hairy, parocular area and scape black, thorax and abdomen black, femurs hairy. Wings. Forewing costal length measured from wing base to apex 9 mm (holotype); hindwing with short filemantous black tail at vein CuA1 terminus, and with a longer tail at vein CuA2 terminus; dorsal wing surfaces unicolourous warm brown, hindwing with a transverse light medial-submedial band (transparent from the ventral surface); fringes brown but in hindwing tornal area longer and basally white forewing ventral surface basal and median area warm brown, postmedian area somewhat lighter, medial-submedial area warm yellow; ventral hindwing surface colouration and



Figs 17–21. *Arzecla* male genitalia capsules in lateral view, under same magnification.

17 – *A. straboris* sp. n., HNHM holotype (Bálint gen. prep. no. 1523); 18 – *A. albolineata* (Lathy, 1936), HNHM voucher (El Faro, Rio Cali, Valle) (Bálint gen. prep. no. 1552); 19 – *A. arza* (Hewitson, 1874), HNHM voucher (Manizales, Caldas, Colombia) (Bálint gen. prep. no. 1696); 20 – *A. straelena* sp. n., HNHM holotype (Bálint gen. prep. no. 1522); 21 – *A. taminella* (Schaus, 1902), HNHM voucher (Pedra Grande, São Bento do Sul, Santa Catarina, Brazil) (Bálint gen. prep. no. 1671). Scale bars (for Figs. 17–19 and 20–21) 0.12 mm.

Рис. 17–21. Генитальная капсула самцов *Arzecla*, вид сбоку, увеличение одинаковое для всех образцов.

17 – *A. straboris* sp. n., голотип из HNHM (Bálint gen. prep. no. 1523); 18 – *A. albolineata* (Lathy, 1936), экземпляр из HNHM (El Faro, Rio Cali, Valle) (Bálint gen. prep. no. 1552); 19 – *A. arza* (Hewitson, 1874), экземпляр из HNHM (Manizales, Caldas, Colombia) (Bálint gen. prep. no. 1696); 20 – *A. straelena* sp. n., голотип из HNHM (Bálint gen. prep. no. 1522); 21 – *A. taminella* (Schaus, 1902), экземпляр из HNHM (Pedra Grande, São Bento do Sul, Santa Catarina, Brazil) (Bálint gen. prep. no. 1671). Масштабные линейки (для рис. 17–19 и 20–21) 0.12 мм.

pattern similar to those of forewing, supplemented with the typical “W” shaped medial-postmedial hairstreak transverse pattern and faint “Thecla-spot” in cell CuA1; tornus black with white antemarginal scaling. Genitalia typical eumaeine with small brush organ (hairs short, densely arranged, fused to tegumen dorsally), uncus large with heavily sclerotized anal margin and slender with pointed apex, valva short with membranous and bulbous apex, aedeagus more than 3 times longer than valval length, with large apical cornutus and a slightly sclerotized but widely open terminus. Female not known.

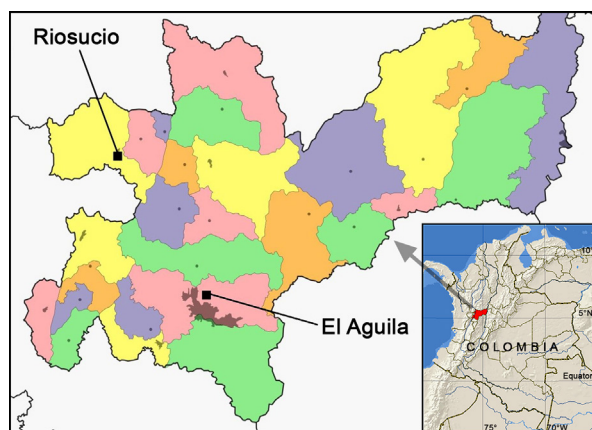


Fig. 22. Geographic situation of the type localities of *Arzecla straelena* sp. n. (Riosucio) and *A. straelena* sp. n. (El Aguila) in department Caldas, Colombia.

Рис. 22. Типовые местонахождения *Arzecla straelena* sp. n. (Риосуцио) and *A. straelena* sp. n. (Эль-Агила) в департаменте Кальдас, Колумбия.

**Bionomics.** Geographical: known only from the type locality: cerro Ingrumá, Municipio de Riosucio, Caldas, Colombia (Fig. 22). Spatial: the holotype specimen was collected at 2270 m. Temporal: the holotype specimen was collected in July.

**Etymology.** The species group name “straelena” is feminine noun. It is an arbitrary combination of the syllables “stra” and “elena” taken from the name of Elena A. Fomina, the wife of late Boris Stradomsky. She worked jointly with her husband and they published important papers on Lycaenidae [e.g. Stradomsky, Fomina, 2009, 2014]. The species is dedicated to her.

**Remarks.** The holotype specimen is smaller than *A. taminella*, the hindwing ventral median-submedian band is conspicuously transparent in the dorsal wingsurface, and the submarginal area of the wings is practically patternless (cf. Figs 7, 8 and 13–16). The genitalia has a brush organ comprised by hairs shorter than those in *A. taminella* and in comparison the basal part of the gnathos is longer than that of *A. taminella* having sharpened elbow whilst it is rounded in *A. taminella* (Figs 20, 21).

In the Transandean and Amazonian regions *A. taminella* occurs together with the rare congeneric species *A. calatia* (Hewitson, 1873). According to its holotype, figured by d’Abreu [1995: 1211], it is the only *Arzecla* species with vivid light yellow submarginal ventral wingsurface areas of both wings. The male *A. calatia* has not been documented yet. As sexual dimorphism in *Arzecla* is very limited, we can suspect that the male is similarly patterned. In fact, it is the case testified by a male specimen

depicted recently in nature in the Upper Amazonian region of Peru [Garwood, 2019]. D'Abbrera [1995: 1211] figured a male *A. taminella* as "T. ? sp. ♂V" from Tarapoto (Peru). These data confirm that the two species is sympatric in the Upper-Amazonian region, as well as in the Atlantic region, where *A. calatia* has been recorded recently [Leviski et al., 2016].

Supposedly the new species *A. straelena* has a wider distribution in the eastern side of the Andes, probably it is restricted to cloud forest habitats above the lowland rainforest belt.

#### Check-list of *Arzecla* species with biogeographical (and country) indications

1. *Arzecla albolineata* (Lathy, 1936) Duarte et Robbins, 2010; Andean (Colombia).
2. *Arzecla arza* (Hewitson, 1874) Duarte et Robbins, 2010; Panamerican (from Mexico to Brazil).
3. *Arzecla calatia* (Hewitson, 1873) Duarte et Robbins, 2010; Panamerican.
4. *Arzecla canacha* (Hewitson, 1877) Duarte et Robbins, 2010; Transandean (Venezuela, Colombia).
5. *Arzecla nubilum* (H. Druce, 1907) Duarte et Robbins, 2010; Atlantic (SE Brazil).
6. *Arzecla paralus* (Godman et Salvin, 1887) Duarte et Robbins, 2010; Transandean (Guatemala to Venezuela).
7. *Arzecla sethon* (Godman et Salvin, 1887) Duarte et Robbins, 2010; Transandean (Mexico to Venezuela).
8. *Arzecla straboris* Bálint, **sp. n.**; Andean (Colombia).
9. *Arzecla straelena* Bálint, **sp. n.**; Andean (Colombia).
10. *Arzecla taminella* (Schaus, 1902) Duarte et Robbins, 2010; Panamerican (from Mexico to Brazil).
11. *Arzecla tarpa* (Godman et Salvin, 1887) Duarte et Robbins, 2010; Transandean (Mexico to Panama, Venezuela).
12. *Arzecla tucumanensis* (K. Johnson et Kroenlein, 1993) Duarte et Robbins, 2010; Amazonian (Chahco) (Argentina).

**Notes.** The genus *Arzecla* is primarily Transandean, as one third of the species ( $n = 4$ ) represents this distributional pattern (33%). The percentage of the Andean ( $n = 3$ ) and the Panamerican ( $n = 3$ ) species is still worth to mention (25%). Together they give the half of the species number. The Amazonian ( $n = 1$ ) and Atlantic ( $n = 1$ ) distributions are less remarkable. In the Atlantic region hitherto a single endemic species is recorded, but probably there are further taxa worth to be recognized.

#### A key for *Arzecla* species based on wing characters

- 1a. Dorsal wingsurfaces blue ..... 2
- 1b. Dorsal wingsurfaces not blue but brown or brown with rufous median patch ..... 3
- 2a. Ventral wingsurfaces brown with contrasting yellow submedian transverse band ..... *A. straboris* **sp. n.**
- 2b. Ventral wingsurfaces brown with contrasting white postmedian transverse line ..... *A. albolineata*
- 3a. Dorsal forewing surface unicolourous brown ..... 4
- 3b. Dorsal forewing surface with rufous median patch ...  
..... *A. canacha*

- 4a. Ventral wingsurfaces brown with contrasting light brown or yellow transverse bands ..... 5
- 4b. Ventral wingsurfaces brown with a single contrasting white-red/brown postmedian transverse line ..... 10
- 5a. Ventral wingsurfaces with faint basal dark scaling and median areas with conspicuous wide dark brown coloured band ..... *A. paralus*
- 5b. Ventral wingsurfaces with contrasting basal dark scaling and submedian areas with light coloured transverse band ..... 6
- 6a. Submedian transverse band vivid yellow, smaller species (forewing costa length <15 mm) ..... 7
- 6b. Submedian transverse band pale yellow or light grey, larger species (forewing costa length >15 mm) ..... 9
- 7a. Ventral wingsurface submarginal areas vivid yellow ....  
..... *A. calatia*
- 7b. Ventral wingsurface submarginal areas light brown ..... 8
- 8a. Hindwing ventral surface yellow submedian band narrow ( 3 mm) supplemented by a wider (3 mm) postmedian brown area ..... *A. taminella*
- 8b. Hindwing ventral surface yellow postmedian band wide (3 mm) supplemented by a narrow (1 mm) postmedian brown area ..... *A. straelena* **sp. n.**
- 9a. Hindwing postbasal brown area wide (3 mm), submarginal area with the very light brown colouration of the submedian band ..... *A. tarpa*
- 9b. Hindwing postbasal brown area not so wide (2 mm), submarginal area light brown and darker coloured than the yellow or light brown submedian band .....  
..... *A. arza*
- 10a. Ventral wingsurface basal and submedian area lighter than postmedian and and marginal areas, postmedian white line basally bordered with light brown scales ...  
..... *A. sethon*
- 10b. Ventral wingsurface basal and submedian only slightly or not darker than postmedian and marginal area, posmedian line basally bordered by red or rufous scales ..... 11
- 11a. Ventral wingsurface postmedian line basally bordered by rufous scales ..... *A. nubilum*
- 11b. Ventral wingsurface postmedian line basally bordered by red scales ..... *A. tucumanensis*

#### Appendix: Material ( $n = 54$ ) deposited in the HHNM and used for comparison

*Arzecla albolineata* – Colombia, Valle: 2. *A. arza* – Brazil, Santa Catarina: 2; Colombia, Caldas: 3; Venezuela, Aragua: 2; Venezuela, Miranda: 2; Venezuela, Sucre: 1. *A. canacha* – Colombia, Valle: 3; Venezuela, Aragua: 1; Venezuela, Tachira: 1. *A. nubilum* – Brazil, Parana: 13; Brazil, Rio Grande do Sul: 6; Brazil, Santa Catarina: 6; Venezuela, Merida: 1. *A. paralus* – Venezuela, Aragua: 1. *A. sethon* – Columbia, Cundinamarca: 1, Venezuela, Zulia: 1. *A. taminella* – Brazil, Santa Catarina: 1. *A. tarpa* – Venezuela, Tachira: 1. *A. tucumanensis* – Argentina, Jujuy: 6.

**Notes.** The wings of the *A. arza* female from Santa Catarina (Brazil) is dorsally blue. The *A. nubilum* specimen from Merida (Venezuela) is most probably representing an undescribed taxon.



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