

**A redescription of the derbid genus  
*Labicerus* Erichson in Schomburgk, 1848  
(Hemiptera: Derbidae: Otiocerinae)**

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**Summary:** The derbid genus *Labicerus*, and its single component species *Labicerus elegans*, was succinctly described by Erichson in Schomburgk (1848) from Guyana but subsequently remained obscure. Here we redescribe and illustrate the genus and species from a rediscovered syntype specimen. We present a preliminary key to the New World genera of Otiocerini and briefly contrast *Labicerus* with *Platonax* Metcalf, 1938, from Panama, which appears to be the superficially most similar taxon. We also provide a checklist of species of New World Otiocerini along with a synoptic distribution for each species.

**Keywords:** Planthoppers, Fulgoroidea, Neotropical region, taxonomy, historical specimens

### 1. Introduction

The New World derbid tribe Otiocerini (Otiocerinae) consists of 11 genera and 57 species (Bourgoin 2023, Table 1). They are distributed from southern Canada to South America and sparsely in the Caribbean (Bartlett et al. 2014; Bourgoin 2023; southernmost records on iNaturalist, <https://www.inaturalist.org/>, from Bolivia and Santa Catarina state in Brazil). The New World fauna of Otiocerini is poorly known and many species remain to be described. Keys to world genera of Otiocerini are provided by Fennah (1952) and Szwedo (2005); US species are treated in Bartlett et al. (2014), and taxa from Mesoamerica in Fowler (1900) and Metcalf (1938). Recent work on Otiocerini has come in the context of planthopper species associated with palms that are potential vectors of palm phytoplasmas (Barrantes et al. 2020; Bahder et al. 2023; Echavarria et al. 2023).

The derbid genus *Labicerus* Erichson (Otiocerinae: Otiocerini) including a single species, *Labicerus elegans* Erichson, was succinctly described from Guyana (as British Guiana) by Erichson in Schomburgk (1848). The entire description, translated from German, is as follows:

"The genus is related to *Derbe*, and is well distinguished by its sensory development; for the third [sic] segment of the antennae is divided into two branches, the inner branch twice as long as the outer, and strongly compressed. The animal is white, the [forewing] with black dots, [and] especially the outer edge is densely spotted. Length from head to [forewing] tip 5'.'" (Erichson in Schomburgk 1848: 615; see Fig. 6).

Subsequently, the species was included in catalogs (e. g., Schaum 1850; Walker 1851; Dohrn 1859; Metcalf 1945), but has not been illustrated or redescribed and was excluded from keys to genera as being too poorly known (e. g., Metcalf 1938; Fennah 1952; Szwedo 2005).

The type material of *Labicerus elegans* was recently rediscovered at the Museum für Naturkunde Berlin. Here we redescribe the genus and species, provide a preliminary key to New World genera of Otiocerini and compare the genus to *Platonax* Metcalf, which appears to be the most similar Neotropical taxon.

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**Table 1:** Checklist of genera and species of New World Otiocerini (Metcalf 1945: Bartlett *et al.* 2014: Bartlett & Wilson 2023; Hendrix & Bartlett 2003; Bourgoin 2023; Echavarria *et al.* in press; localities updated using iNaturalist).

***Anotia* Kirby 1821**

- 1 *Anotia bonnetti* Kirby, 1821 (type of genus) – USA (AL, FL, GA, IL, KS, LA, MO, NC, OH, SC, TX).
- 2 *Anotia burnetti* Fitch, 1856 – USA (AL, IA, IN, MD, MI, MS, NC, NJ, NY, OH, PA, SC, TN, VA), Canada (Ontario)
- 3 *Anotia caliginosa* Ball, 1937 – USA (AZ)
- 4 *Anotia firebugia* Bahder & Bartlett, 2020 – Costa Rica, Belize, Nicaragua, Mexico (Quintana Roo, Sinaloa, and Veracruz), and USA: AZ, TX
- 5 *Anotia fitchi* (Van Duzee, 1893) – USA (AL, AR, FL, GA, IL, KS, LA, MO, MS, NC, NY, OH, OK, PA, SC, TN, TX)
- 6 *Anotia formaster* Fennah, 1952 – Trinidad
- 7 *Anotia invalida* Fowler, 1904 – Guatemala, Panama
- 8 *Anotia kirkaldyi* Ball, 1902 USA (IA, OH; west of the Appalachian mountains)
- 9 *Anotia lineata* Ball, 1937 – USA (AZ)
- 10 *Anotia marginicornis* Fowler, 1904 – Guatemala
- 11 *Anotia mcateeai* (Dozier, 1928) – USA (IL, MS)
- 12 *Anotia pellucida* Fowler, 1904 – Mexico (Veracruz)
- 13 *Anotia punctata* Metcalf, 1938 – Panama
- 14 *Anotia robertsonii* Fitch, 1856 – USA (AL, AR, DE, FL, IL, KS, KY, LA, MA, MD, MO, NC, NE, NJ, OH, OK, PA, SC, TN, TX, VA); Canada (Ontario, Quebec)
- 15 *Anotia rubrinoda* Fennah, 1952 – Trinidad
- 16 *Anotia ruficollis* Fowler, 1904 – Mexico (Guerrero)
- 17 *Anotia sanguinea* Fennah, 1952 – Trinidad
- 18 *Anotia smithi* Fowler, 1904 – Mexico (Guerrero)
- 19 *Anotia tenella* Fowler, 1904 – Mexico (Guerrero)
- 20 *Anotia uhleri* (Van Duzee, 1889) – USA (AL, CT, FL, GA, IA, IL, IN, LA, MA, ME, MI, MN, MO, MS, NC, NH, NY, OH, OK, RI, SC, TN, VT, WV); Canada (Ontario, Quebec)
- 21 *Anotia westwoodi* Fitch, 1856 – USA (NY; east of the Appalachian Mountains)

***Apache* Kirkaldy 1901**

- 22 *Apache californicum* Wilkey, 1963 – USA (CA)
- 23 *Apache degeeri* (Kirby, 1821) (type of genus) – USA (Central states and all states east of the Mississippi River; AL, AR, CT, DE, FL, GA, IA, IL, IN, KS, LA, MA, MD, ME, MN, MO, MS, NC, NH, NJ, NY, OH, OK, PA, RI, TN, TX, WV); Canada (CAN: Nova Scotia, New Brunswick, Prince Edward Island, Quebec, Ontario)

***Cobacella* Fennah 1952**

- 24 *Cobacella palmensis* Bahder & Bartlett, 2023 – Costa Rica
- 25 *Cobacella rubescens* (Fowler, 1900) (type of genus) – Mexico (Veracruz, Tabasco)
- 26 *Cobacella sexguttata* Fennah, 1952 – Trinidad

***Homometria* Fennah, 1952** (described as subgenus)

- 27 *Homometria elatior* (Fowler, 1900) – Panama

***Kubilaya* Koçak & Kemal, 2010** (replacement name for preoccupied *Iquitosa* Fennah, 1945);

- 28 *Kubilaya scalprata* (Fennah, 1952) – Trinidad

- 29 *Kubilaya shannoni* (Fennah, 1945a) – Peru

***Labicerus* Erichson in Schomburgk 1848**

- 30 *Labicerus elegans* Erichson in Schomburgk 1848 – Guyana

***Otiocerus* Kirby 1821**

- 31 *Otiocerus abbotti* Kirby, 1821 – USA (AL, AR, CT, FL, GA, IL, IN, MD, MN, MO, MS, NC, NY, OH, PA, TN, WI); Canada (Quebec)
- 32 *Otiocerus amyotii* Fitch, 1856 – USA (AL, CT, DC, GA, IA, IL, MA, MD, NC, NJ, NY, OH, PA, TN, VA, WV); Canada (Quebec)
- 33 *Otiocerus breviceps* Fowler, 1900 – Panama
- 34 *Otiocerus coquebertii* Kirby, 1821 USA (AR, CT, DE, GA, IA, IL, IN, KY, MA, MD, ME, MI, MN, MO, NC, NH, NJ, NY, OH, PA, RI, TN, TX, VT, WI, WV); Canada (Nova Scotia, New Brunswick, Prince Edward Island, Quebec, Ontario)
- 35 *Otiocerus fontis* Fennah, 1952 – Saint Lucia
- 36 *Otiocerus francilloni* Kirby, 1821 – USA (DE, FL, GA, IA, IL, MN, MS, NJ, NY, OH, TX); Canada (Ontario)
- 37 *Otiocerus kirbyi* Fitch, 1851 – USA (AL, MD, MS, NC, NY, WV); Canada (Nova Scotia, Ontario)
- 38 *Otiocerus lyncaeste* Fennah, 1952 – Trinidad
- 39 *Otiocerus reaumurii* Kirby, 1821 – USA (AL, AR, DE, FL, GA, IA, IL, LA, MD, MO, MS, NY, OH, OK, TN, TX, VA, WI)
- 40 *Otiocerus regalis* Fennah, 1952 – St. Vincent
- 41 *Otiocerus schoenherri* Stål, 1859 – Puerto Rico
- 42 *Otiocerus stollii* (Kirby, 1821) (type species of genus) – USA (AL, AR, FL, GA, IA, IL, LA, MD, MO, MS, NC, NJ, NY, OH, OK, PA, TX, WI); Canada (Ontario)
- 43 *Otiocerus venusta* Fowler, 1900 – Guatemala, Panama
- 44 *Otiocerus wolfii* Kirby, 1821 – USA (broadly in Eastern US and adjacent Canada, especially north; AL, AR, CT, DE, FL, GA, IA, IL, KS, KY, LA, MA, MD, ME, MI, MN, MO, MS, NC, NE, NH, NJ, NY, OH, OK, PA, RI, SC, TN, VA, VT, WI, WV); Canada (Ontario, Quebec)

***Platocerella* Fennah 1952**

- 45 *Platocerella rubicunda* (Muir, 1918) – Guyana

***Platonax* Metcalf 1938**

- 46 *Platonax maculata* Metcalf, 1938 – Panama

***Sayiana* Ball 1928**

- 47 *Sayiana maracasa* Fennah, 1952 – Trinidad
- 48 *Sayiana puertoricensis* Caldwell, 1951 – Puerto Rico
- 49 *Sayiana sayi* (Ball, 1902) (type of genus) – USA (AL, AR, FL, IA, IL, KS, LA, MA, MS, NC, NY, OH, OK, SC, TN, VA, WI); Canada (Ontario)
- 50 *Sayiana viequensis* Caldwell, 1951 – Puerto Rico

***Shellenius* Ball, 1928**

- 51 *Shellenius ballii* (Mc Atee, 1923) (type of genus) – USA (AL, FL, IL, MD, MO, MS, OH, NC, NH, SC, TN); Canada (Ontario, Quebec)
- 52 *Shellenius gracilior* (Fowler, 1900) – Guatemala
- 53 *Shellenius grisea* (Fowler, 1900) – Mexico (Guerrero)
- 54 *Shellenius interruptus* (Fowler, 1900) – Guatemala
- 55 *Shellenius montana* (Fowler, 1900) – Mexico (Guerrero), Panama
- 56 *Shellenius schellenbergii* (Kirby, 1821) – USA (AL, AR, FL, GA, IL, LA, MA, MD, MO, MS, NC, NJ, NY, OH)
- 57 *Shellenius serratus* Bahder & Bartlett, 2023 – Costa Rica

## 2. Methods

The descriptions of *Labicerus elegans* are based on a female syntype specimen in the Hemiptera collection of the Museum für Naturkunde Berlin. The type specimen of *Platonax maculata* Metcalf (from the Museum of Comparative Zoology, Harvard) is illustrated for comparison. Morphological terminology generally follows that of Bartlett et al. (2014), except forewing venation following Bourgoin et al. (2015).

The list of species was updated from Bourgoin (2023), with distribution records compiled from Fowler 1900; Metcalf 1945; Bartlett et al. 2014; Bartlett & Wilson 2023; Hendrix & Bartlett 2023; Bourgoin 2023; Echavarria et al. 2023; and iNaturalist (<https://www.inaturalist.org/>).

## 3. Results

Erichson in Schomburgk (1848) did not specify the number of specimens available for study, nor their genders, and so the specimen in the Museum für Naturkunde Berlin may be the holotype by monotypy (viz. ICZN 1999, article 73.1.2); however, following ICZN (1999) recommendation 73F, we are proceeding as though syntypes may exist. Also, because the specimen in the Museum für Naturkunde Berlin is a female, at this time we are not designating a lectotype because critical species recognition features are associated with male terminalia in Otiocerini and it would be advantageous to designate a male lectotype if additional specimens were found. Two additional specimens associated with the *Labicerus elegans* syntype at Museum für Naturkunde Berlin (cited below) appear to be from Sri Lanka and do not represent additional specimens of *Labicerus*.

### Systematics

Family Derbidae Spinola, 1839

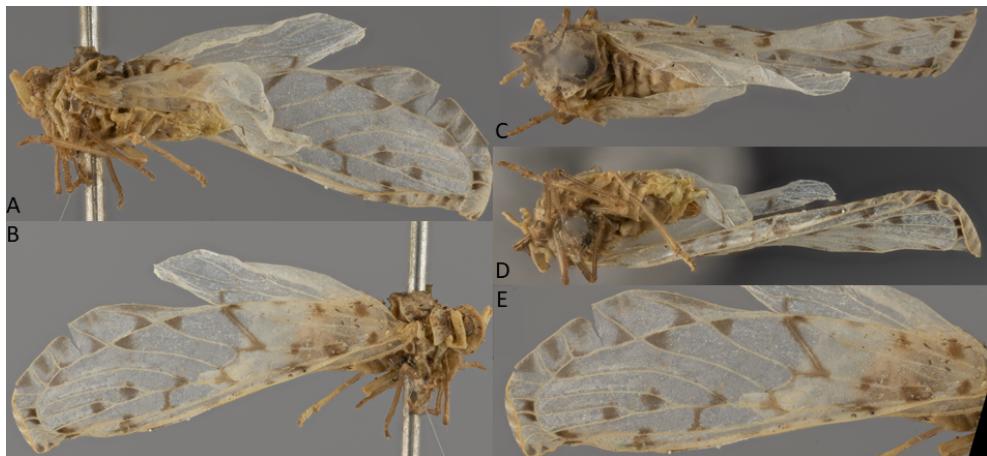
Subfamily Otiocerinae Muir, 1917

Tribe Otiocerini Muir, 1917

### A preliminary key to New World genera of Otiocerini

1. Antennae bearing elongated appendage(s) (e.g., Figs. 2 B, C; 5B, D, E, H) ..... 2
- 1\*. First antennal segment devoid of appendages (Figs. 5A, C, F, G) ..... 6
2. Costal margin of forewing scalloped, bearing 2 or more lobes (Fennah 1945, fig. 41 as *Iquitosa* Fennah); mesonotum usually bearing two large tubercles; South America, Trinidad .... *Kubilaya* Koçak & Kemal
- 2\*. Costal margin of forewing not lobed; mesonotal tubercles absent ..... 3
3. Head in lateral view rounded and weakly projected (Fig. 5D), length in front of eye less than the widest length of the eye; forewing white with dark spots (e.g., Fig. 1E); Guyana ..... *Labicerus* Erichson
- 3\*. Head in lateral view strongly projected in front of eyes, 2x or more at the widest length of the eye (Figs. 5B, E, H) ..... 4
4. General color rose or reddish; in lateral view, dorsum of head sinuate (Fig. 5B); dorsal margin of wings in repose sharply angled dorsal in apical third; forewings with dusky spots in most cells; USA ..... *Apache* Kirkaldy

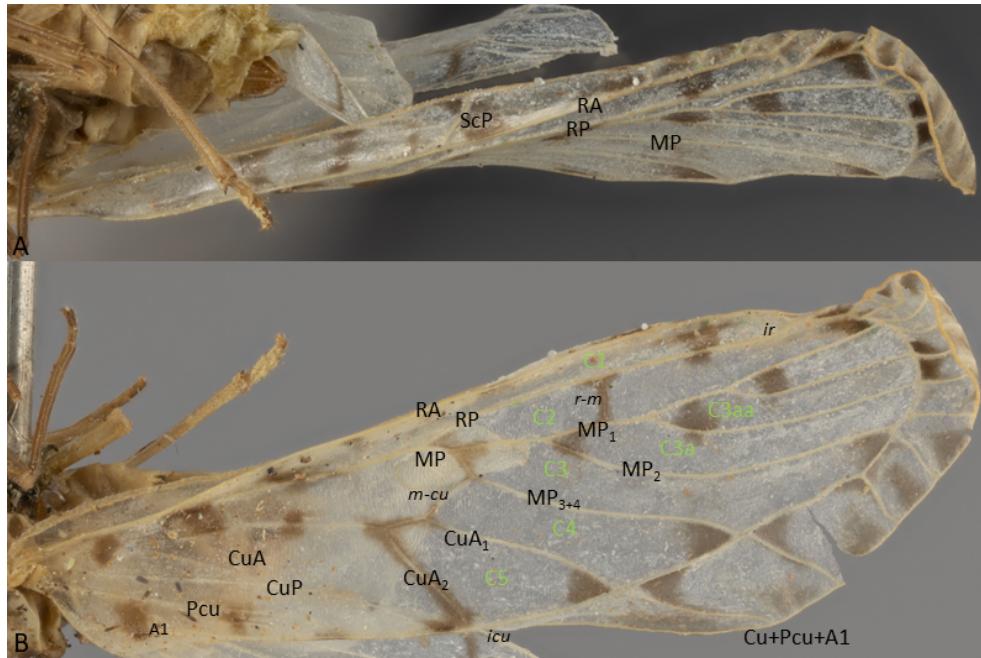
- 4\*. General color white or yellow; in lateral view, dorsum of head flat (Fig. 5E) or rounded (Fig. 5H), dorsal margin of wings nearly straight; forewings usually without dusky spots in most cells (although some dark spots may be present); USA, Mesoamerica ..... 5
5. In lateral view, the demarcation between vertex and frons is obtusely angular (Fig. 5E) ..... *Otiocerus* Kirby
- 5\*. In lateral view, the demarcation between vertex and frons is smoothly rounded (Fig. 5H) ..... *Shellenius* Ball
- 6(1). Head in lateral view inclined, bluntly conical, and up-projected (Figs. 5A, G) ..... 7
- 6\*. Head in lateral view anteriorly rounded or barely projected in front of eyes (Figs. 5C, F) ..... 9
7. Antennae short, less than  $\frac{3}{4}$  length of frons, head little produced (Fennah 1952, fig. 38); Panama ..... *Homometria* Fennah
- 7\*. Antennae longer, length equal or exceeding that of frons; head distinctly produced (Figs. 5A, G) ..... 8
8. Humeral angle of the forewing with an elongated, triangular projection (Bartlett et al. 2014, fig. 64J) ..... *Sayiana* Ball
- 8\*. Humeral angle of the forewing with a low rounded projection or none at all ..... *Anotia* Kirby
- 9(6). Head broadly rounded ahead of eye, head projection about equal to eye width (Fig. 5C); MP forked from ScP+R near basal cell; Mesoamerica ..... *Cobacella* Fennah
- 9\*. Head narrowly projected ahead of eyes, head projection much less tan eye width (Fig. 5F); MP forked from SC+R well distad of basal cell ..... 10
10. Head smoothly rounded into a semicircle in lateral view (Fig. 5F), wings white with dark markings (Fig. 3); pedicle of antennae flattened; Panama ..... *Platonax* Metcalf
- 10\*. Head angulately rounded in lateral view (Fennah 1952, fig. 35A), wings and body with red suffusion; pedicle of antennae rounded in cross-section; Guyana ..... *Platocerella* Fennah



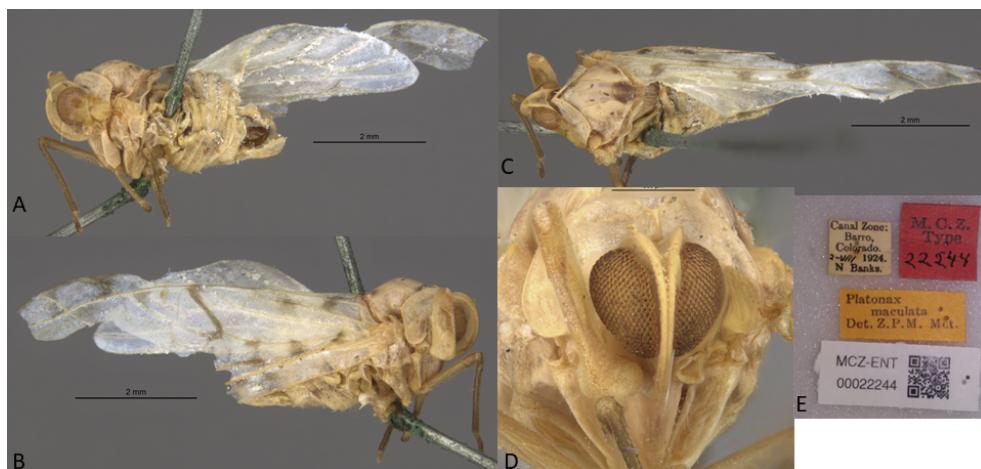
**Fig. 1:** *Labicerus elegans* syntype habitus, A) left lateral view, B) right lateral view, C) dorsal view, D) ventral view, E) right forewing.



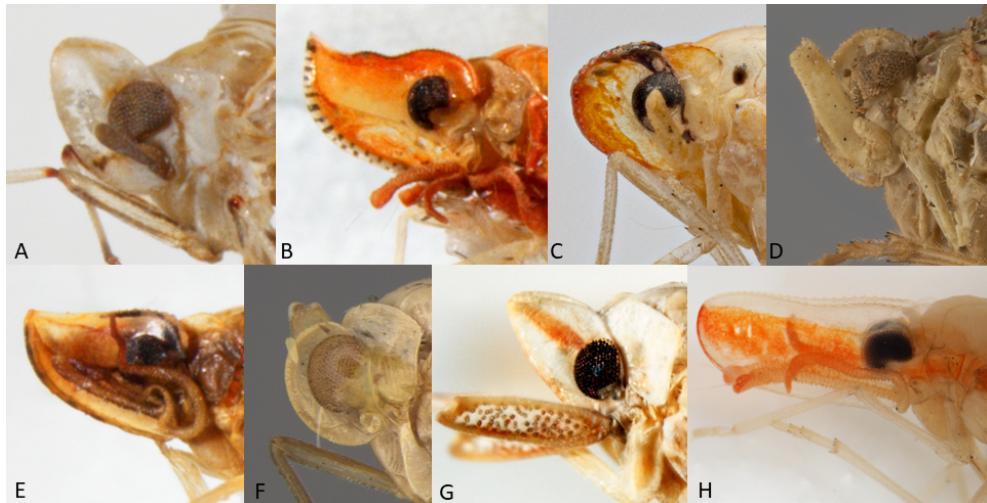
Fig. 2: *Labicerus elegans* syntype, head and thorax, A) frontal view, B) right lateral view. C) ventral view, D) labels.



**Fig. 3:** *Labicerus elegans* forewing venation (black = vein, italics = crossvein, green), A) ventral view (showing costal margin, folded out of lateral view), B) right lateral view (reversed so the wing leading margin is topmost); wing nomenclature follows Bourgoin et al. (2015). (The *icu* crossvein is below the fold, out of view).



**Fig. 4:** *Platonax maculata* holotype male, habitus view, A) left lateral view, B) right lateral view, C) dorsal view, D) frontal view, E) labels (images from Museum of Comparative Zoology, Harvard University, ©President and Fellows of Harvard College).



**Fig. 5:** Left lateral view of heads of New World Otiocerini. A) *Anotia burnetii* Fitch (USA, Alabama), B) *Apache degeeri* Kirby (USA: North Carolina), C) *Cobacella* sp. (Costa Rica), D) *Labicerus elegans* (syntype, Guyana), E) *Otiocerus stollii* Kirby (USA: Louisiana), F) *Platonax maculata* Metcalf (holotype, Panama), G) *Sayiana sayi* Ball (USA: Arkansas), H) *Shellenius ballii* McAtee (USA: Tennessee).

### Genus *Labicerus* Erichson in Schomburgk, 1848

**Type species.** *Labicerus elegans* Erichson in Schomburgk, 1848 by monotypy.

**Diagnosis.** Head in lateral view semicircularly rounded, projected in front of eye for less than width of eye (longest axis). Antennae elongate, longer than frons, and bearing an elongated projection; pedicle flattened. Wings with MP branching from ScP+R in proximal third of wing; ScP forked from RA near wing midlength.

**Remarks.** *Labicerus* (Figs. 1, 2) appears to be superficially most similar to *Platonax* (Fig. 3), including the general shape of the head (Figs. 5D, F) and the general coloration of the body and wings, but that genus lacks the appendage on the antennae. *Platonax* also appears to have distinctly broader antennae than *Labicerus*. Among genera with an antennal appendage *Apache*, *Otiocerus*, and *Shellenius* (Figs. 5B, E, H) all have a much more strongly projected head, and *Kubilaya* has the leading margin of the wing scalloped and a pair of large tubercles on the thorax (Fennah 1945, 1952 as *Iquitosa* Fennah).

**Etymology.** The genus name is derived from the Greek terms “*lavi*” (λαβί, handle), combined with “*kéras*” (κέρας, horn, antenna), and is masculine in gender (Dmitriev, 2002).

#### *Labicerus elegans* Erichs. nov. gen. nov. spec.

Die Gattung ist mit *Derbe* verwandt, und zeichnet sich sehr durch Fühlerbildung aus; das dritte Glied der Fühler ist nämlich in zwei Aeste gespalten, der innere Ast doppelt so lang als der äussere, stark zusammengedrückt. Das Thierchen ist weiss, die Decke mit schwarzen Punkten, namentlich ist der Aussenrand dicht gefleckt. Länge vom Kopfe bis zur Deckenspitze 5'''.

**Fig. 6:** Original description of *Labicerus elegans* by Wilhelm Ferdinand Erichson, published in Schomburgk (1848: 615). From [www.biodiversitylibrary.org](http://www.biodiversitylibrary.org)

*Labicerus elegans* Erichson in Schomburgk, 1848 (Figures 1, 2, 3, 5D)

**Amended diagnosis.** A pale species bearing whitish forewings with dark maculations. Head in lateral view smoothly semicircular from vertex to frontoclypeal suture, projected in front of eye for distance less than greatest width of eye. Antennae elongated (exceeding anterior head margin) with single elongated serpentine projection from near the base of the pedicel, pedicel flattened in cross-section.

**Amended description.**

**Color.** Body irregularly patterned from yellow-brown to brown (probably paler in life; Fig. 1). Antennae yellow-tan, fore and middle leg brown, hind leg paler. Forewings (Fig. 1E) whitish with concolorous veins bearing dark markings on cells and veins as follow: vein CuA<sub>2</sub> and proximal part of CuA<sub>1</sub> (to m-cu crossvein), first fork of MP (MP<sub>1+2</sub> from MP<sub>3+4</sub>) and first r-m crossvein; dark spot near distal apex of basal cell, 2 dark spots in clavus, between vases of MP and CuA, at apices of cells C5, C4 and C3, near forks of MP<sub>1</sub> and MP<sub>2</sub>, and two subsequent forks of MP<sub>1</sub> (MP<sub>1.1</sub> from MP<sub>1.2</sub>, MP<sub>1.1.1</sub> from MP<sub>1.1.2</sub>) and in most apical cells.

**Structure.** Body length (including wings) about 10.5 mm. Head much narrower than pronotum. Vertex narrowly triangular with lateral margins foliately elevated, bearing a row of pustules (continuing on to frons), narrowing anteriorly, approximated apically, disc strongly concave, posterior margin concave. Frons (Fig. 2A) strongly compressed, in frontal view lateral margins strongly approximate, in lateral view (Fig. 2B) smoothly semicircular from posterior margin of vertex to frontoclypeal suture (projected in front of the eye for less than the width of the eye). Clypeus angled 90 degrees from frons in lateral view, in frontal view narrowly triangular. Antennae elongated, exceeding dorsal margin of head; scape short, about as long as wide, pedicel elongate and flattened in cross-section, bearing an elongate curved appendage (Fig. 2C) from the ventral surface. Eye semicircular, lateral ocellus apparently obsolete.

Pronotum in dorsal view short along midline, posterior margin deeply angulate; in lateral view, posteriorly inclined, paradiscal region broad, apically truncate at level of ventral margin of eye. Mesonotum relatively large, appearing tricarinate, scutum convex in lateral view, in dorsal view posterior margin of mesoscutellum rounded; lateral margin of mesothorax carinate. Posterior tibiae laterally unarmed, distally with 4(1+3) denticles, these with separated lateral spine largest, remaining smaller and arranged in an oblique row; metabasitarsus with 4 small uniform denticles in crescent-shaped row; second tarsomere bearing 5 small denticles, lateralmost slightly larger than median 3, in crescent-shaped row. Setae between denticles of both tarsomeres. Metabasitarsus about twice length of next tarsomere, approximately the length of second and thirds tarsomeres cumulatively. Pretarsal claws prominent, slender; arolia distinct (not reduced).

Forewings (Fig. 3) elongated and spatulate, narrowest basally, widest in distal 2/3 length, trailing margin broadly convex. Clavus open, composite vein Pcu+A1 projecting anteriorly to encompass CuP and branches of CuA before reaching wing margin past midlength; marginal cells at wing apex mostly longer than broad. RP branching from ScP+R near apex of basal cell; ScP reaching wing margin near forewing midlength. Branching pattern RA apparently 4-branched, RP 2-branched, MP 7-branched, CuA 2-branched (anastomosed to form closed procubital cell (Emeljanov 1996).

Male terminalia unknown.

**Remarks.** In the female specimen of *Labicerus elegans*, the forewings are curled in a fashion that makes interpretation difficult. It appears that the RP and MP veins are joined proximally and fork near the wing midlength, but such an arrangement is not found in other Otiocerini to our knowledge, and the base of the MP may be obscured by the uneven plane of the wing. Since the branching of RP+MP would be quite unusual in Otiocerini, we would like to confirm this observation with additional material when it becomes available.

### Material examined

#### Type material

*Labicerus elegans* (Syntype, 1 specimen, ZMHB, female) “4990 // Labicerus / elegans / er / Brit. Guy. Sch [illegible; handwritten, blue paper, understood as British Guiana Schomburkg] / Syntypus / Zoolog. Museum / Berlin [Red paper] // MFN URI / <http://coll.mfn-berlin.de/u/e2bf8a> [2D barcode label].”

Uniform Resource Identifier for collection NURI; 2D barcode label (QR code) Museum für Naturkunde Berlin / Collection Derbidae / [Http://coll.mfn-berlin.de/u/](http://coll.mfn-berlin.de/u/) MFNB\_Hemi\_807173

*Platonax maculata* (holotype, 1 specimen, MCZ, male) “Canal Zone: / Barro / Colorado. / 2-viii 1924 / N Banks. // M.C.Z. / Type / 22244 [red paper] // Platonax / maculata / Det. Z.P.M. Met. [yellowish-brown paper] // MXZ-ENT / 00022244 [2D barcode label].”

**Remark.** The labeling of the specimens from the Hemiptera collections at the Museum für Naturkunde Berlin might be confusing. The original ZMHB label refers to “Zoological Museum, Humboldt-University, Berlin”, created for the zoological objects in the collection of Humboldt-University, and before the Museum für Naturkunde was founded in 1889, to accommodate the natural history collections of the university. The ZMHB label remained in use for many years, before it was replaced by MFN, or MFNB.

#### Other Material Examined

Uncertain taxon (1 specimen, ZMHB, female) “Cat. No / 4998 // Ceylon / Hirtner [handwritten] / Labicerus spec. / Von Melichar / undeterminiert [?] / Zurück // MfN URI / <http://coll.mfn-berlin.de/u/308982>”; (1 specimen, ZMHB, male), same except 4991, MfN URI / <http://coll.mfn-berlin.de/u/593225>”

### 4. Discussion

*Labicerus* is a previously obscure taxon about which little is known. While some details remain uncertain, we provide a basis for recognizing the taxon among the currently recognized New World genera of Otiocerini. The genus appears to be infrequently observed based on records from iNaturalist where a review of records of Derbidae from northern South America and southern Mesoamerica failed to reveal any observations that were definitively *Labicerus*. However, there were relatively few derbid records from Guyana and adjacent regions among these observations. Additional specimens of *Labicerus* might be sought from Natural History collections from the region, although the effort may be complicated by the many undescribed Otiocerini.

## 5. Zusammenfassung

Wiederbeschreibung der Derbiden-Gattung *Labicerus* Erichson in Schomburgk, 1848 (Hemiptera: Derbidae: Otiocerinae). Die Derbiden-Gattung *Labicerus* mit ihrer einzigen Art *Labicerus elegans* wurde von Erichson in Schomburgk (1848) aus Guyana nur sehr knapp beschrieben, sodass ihre genaue Identität lange Zeit ungeklärt war. Hier verfassen wir eine Wiederbeschreibung auf Basis eines wiederentdeckten Syntypus. Zudem präsentieren wir einen Schlüssel zu den Gattungen der Otiocerini der Neuen Welt und stellen *Labicerus* der ihr sehr ähnlich sehenden, aus Panama beschriebenen Gattung *Platonax* Metcalf, 1938 gegenüber. Zudem bieten wir eine Checkliste der Otiocerini der Neuen Welt, einschließlich Angaben zur Verbreitung.

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## 7. Literatur

- Bahder B.W., Echavarria M.A.Z., Barrantes E.A.B., Helmick E.E., Bartlett, C.R. 2023. A new species of planthopper in the genus *Shellenius* (Hemiptera: Fulgoroidea: Derbidae) from palms in Costa Rica. – *Zootaxa* 5306 (5): 357–369. <https://doi.org/10.11646/zootaxa.5306.5.5>.
- Barrantes E.A., Echavarria M.A.Z., Bartlett C.R., Helmick E.E., Cummins P.P., Ascunce M.S., Bahder B.W. (2020): A new species of planthopper in the genus *Anotia* Kirby (Hemiptera: Auchenorrhyncha: Derbidae) from coconut palm in Costa Rica. – *Zootaxa* 4763 (1): 50–60. <https://doi.org/10.11646/zootaxa.4763.1.4>
- Bartlett C.R., Wilson S.W. (2023): A Review of the Planthoppers (Hemiptera: Fulgoroidea) of the United States: Supplement 1. – *Transactions of the American Entomological Society* 149 (1): 39–69. <https://doi.org/10.3157/061.149.0104>
- Bartlett C.R., O'Brien L.B., Wilson S.W. (2014): A review of the planthoppers (Hemiptera: Fulgoroidea) of the United States. – *Memoirs of the American Entomological Society* 50: 1–287.
- Bourgoin T. (2023): FLOW (Fulgoromorpha Lists on The Web): a world knowledge base dedicated to Fulgoromorpha. Version 8 (updated 5 July 2023). – URL: <https://flow.hemiptera-databases.org/flow/> [Accessed 5 July, 2023].
- Bourgoin T., Wang R.R., Asche M., Hoch H., Soulier-Perkins A., Stroinski, A., Yap, S., Szwedo J. (2015): From micropterism to hyperpterism: recognition strategy and standardized homology-driven terminology of the forewing venation patterns in planthoppers (Hemiptera: Fulgoromorpha). – *Zoomorphology*, 134 (1), 63–77. <https://doi.org/10.1007/s00435-014-0243-6>.
- Dmitriev D.A. (2022): Etymology and grammatical gender of generic names in Auchenorrhyncha (Hemiptera). *Illinois Natural History Survey Bulletin* 43 (2022001): 1–224. <https://doi.org/10.21900/j.inhs.v43.837>.
- Dohrn F.A. (1859): Homoptera. Catalogus Hemipterorum. – Herausgegeben von dem entomologischen Vereine zu Stettin 1859: 56–93.

- Echavarria M.A.Z., Barrantes E.A.B., Helmick E.E. Bartlett, C.R., Bahder, B.W. 2023): A new species of planthopper in the genus *Cobacella* (Hemiptera: Auchenorrhyncha: Derbidae) from oil palms (*Elaeis guineensis*) in Costa Rica. – Zootaxa 5351(1): 107-121. DOI: 10.11646/zootaxa.5351.1.4.
- Emeljanov A.F. (1996): On the system and phylogeny of the family Derbidae (Homoptera, Cicadina). – Entomological Review 75 (2): 70–100. [English translation of Entomologicheskoe Obozrenie [1994] 73 (4): 783–811 from Russian].
- Fennah R.G. (1945): New lanternflies (Fulgoroidea) from South America. – Proceedings of the United States National Museum 96 (3189): 95–106.
- Fennah R.G. (1952): On the generic classification of Derbidae (Fulgoroidea), with descriptions of new Neotropical species. – Transactions of the Royal Entomological Society of London 103 (4): 109–170.
- Fowler W.W. (1900): Order Rhynchota. Suborder Hemiptera-Homoptera (Continued). – Biologia Centrali-Americana 1: 57–76.
- Hendrix S.V., Bartlett C.R. (2023): On the status of *Otiocerus coquebertii rubidus* Osborn 1938 (Derbidae: Otiocerinae: Otiocerini). – Entomological News 130 (4): 391–396. <https://doi.org/10.3157/021.130.0409>.
- ICZN (International Commission on Zoological Nomenclature) (1999): International Code of Zoological Nomenclature, 4th edition. – International Trust for Zoological Nomenclature, The Natural History Museum, London. URL: <https://www.iczn.org/the-code/the-code-online/> [accessed 5 July 2023].
- Metcalf Z.P. (1938): The Fulgorina of Barro Colorado and other parts of Panama. – Bulletin of the Museum of Comparative Zoology at Harvard College 82: 277–423.
- Metcalf Z.P. (1945): General Catalogue of the Homoptera. Fascicule IV, Fulgoroidea, Part 4 Derbidae. – North Carolina State College, Raleigh.
- Muir F.A.G. (1917): The Derbidae of the Philippine Islands. – Philippine Journal of Science 12: 49–105.
- Schaum H.R. (1850): Fulgorellae. Allgemeine Encyklopädie der Wissenschaften und Künste in alphabatischen folge von Genannten Schriftstellern bearbeitet und herausgegeben von I. S. Ersch und I. G. Gruber mit Kupfern und Charten, Erster Section A -G 51: 58–73.
- Schomburgk R. (1848): Versuch einer Fauna und Flora von Britisch-Guiana nach Vorlagen von Johannes Müller, Ehrenberg, Erichson, Klotsch, Troschel, Cabanis und andern. Verlagsbuchhandlung J. J. Weber, Leipzig, pp. 533–1260 (3rd part of the book series "Reisen in Britisch-Guiana in den Jahren 1840-1844").
- Spinola M. (1839): Essai sur les Fulgorelles, sous-tribu des Cicadaires, ordre des Rhyngotes. – Annales de la Société Entomologique de France 8: 133–337.
- Szwedo J. (2005): Notes on Otiocerini with a second record of Derbidae in Eocene Baltic amber (Hemiptera: Fulgoromorpha: Derbidae). – Insect Systematics & Evolution 36 (2): 161–172.
- Walker F. (1851): List of the specimens of Homopterous insects in the collection of the British Museum 2: 261–636.

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