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# Miscellaneous notes on the fireflies (Coleoptera: Lampyridae) in McDermott's 1966 catalogue of Lampyridae

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Miscellaneous notes on the fireflies (Coleoptera: Lampyridae)  
in McDermott's 1966 catalogue of Lampyridae

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## Miscellaneous notes on the fireflies (Coleoptera: Lampyridae) in McDermott's 1966 catalogue of Lampyridae

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**Abstract.** Nomenclatural changes are proposed and herein implemented for several firefly taxa in the family Lampyridae (Coleoptera). Dates of publication are corrected for *Lampyris brutia* Costa, 1882, *Diaphanes costulatus* (Kolbe, 1897), *Diaphanes fraternus* (Kolbe, 1897), *Diaphanes kilimanus* (Kolbe, 1897), *Diaphanes breviusculus* (Kolbe, 1897) (a junior synonym of *Diaphanes notaticollis* E. Olivier), *Diaphanes piligerus* (Kolbe, 1897), *Diaphanes planititanus* (Kolbe, 1897), *Diaphanes volkensi* (Kolbe, 1897) (a junior synonym of *Diaphanes rugicollis* (Fairmaire)), *Diaphanes signaticollis* Pic, 1951, *Diaphanes ugandanus* (Kolbe, 1897), *Pyrocoelia iwasakii* (Matsumura, 1918), *Pyrocoelia tappana* (Matsumura, 1918), *Lamprocera latreillei* (Kirby, 1818), *Tenaspis semifusca* (Gorham, 1881), *Lucernuta savignii* (Kirby, 1818), *Aspisoma candellarium* Reiche, 1845, *Aspisoma roseiventer* (E. Olivier, 1888), *Pyractomena* Melsheimer, 1846, *Pyractomena flavocincta* LeConte, 1852 (a junior synonym of *Pyractomena angulata* (Say)), *Pyractomena angustata* LeConte, 1852, and *Pyractomena lucifera* Melsheimer, 1846.

**Key words.** Nomenclature, authorship, date of publication.

## Introduction

Frank Alexander McDermott (1885–1966) published over 60 scientific articles on fireflies and bioluminescence. His revision of the taxonomy of Lampyridae (McDermott 1964) and an updated lampyrid catalogue based on Ernest Olivier's (1910) catalogue (McDermott 1966), were his most important contributions. Assembling such a comprehensive catalogue was a significant accomplishment before the advent of the internet and relatively easy access to the literature. Consequently, mistakes with dates and names were included in the catalogue. Some mistakes most likely resulted from a lack of access to the literature, and simple typographical errors during the typing of the catalogue. Modern online resources (www.itis.gov; Integrated Taxonomic Information System) use McDermott's catalogue and reproduce these inaccuracies. Here we address these errors and propose corrections and background for each case.

## Materials and Methods

Methods follow Keller and Branham (2018). Additionally, more recent literature was investigated to document the replication of these mistakes.

## Results and Discussion

### Dates of Publication

#### ***Lampyris brutia* Costa, 1882**

*Lampyris brutia* Costa 1882: 34

*Lampyris brutia* Costa, 1881 [sic]: McDermott 1966: 3

**Note.** McDermott's notecard had the incorrect date associated with this species (Fig. 1a). Costa's manuscript was presented at a meeting on March 14, 1881, but the article was printed in 1882. There is also some confusion about the later reference cited by Geisthardt. Geisthardt (1984) cited Costa, 1881. In 1987, he cited Costa, 1884 on page 99 and Costa, 1882 on page 109 (Geisthardt 1987). In a short paragraph, Geisthardt (1999) again cited 1884 as the date of publication. Lastly, he used Costa, 1883 in an updated checklist of Italian *Lampyris* species (Geisthardt 2007).

#### ***Diaphanes costulatus* (Kolbe, 1897)**

*Lampyris costulata* Kolbe 1897: 218

*Diaphanes costulatus* (Kolbe, 1898 [sic]): McDermott 1966: 10

**Note.** McDermott's notecard had the incorrect date associated with this species (Fig. 1b).

#### ***Diaphanes fraternus* (Kolbe, 1897)**

*Lampyris fraterna* Kolbe 1897: 218

*Diaphanes fraternus* (Kolbe, 1898 [sic]): McDermott 1966: 11

**Note.** McDermott's notecard had the incorrect date associated with this species.

#### ***Diaphanes kilimanus* (Kolbe, 1897)**

*Lampyris kilimana* Kolbe 1897: 217

*Diaphanes kilimanus* (Kolbe, 1898 [sic]): McDermott 1966: 11

**Note.** McDermott's notecard had the incorrect date associated with this species.

#### ***Diaphanes notaticollis* E. Olivier, 1888**

*Diaphanes notaticollis* E. Olivier 1888: 57

*Diaphanes brevisculus* (Kolbe, 1897) [syn.]

*Lampyris breviscula* Kolbe 1897: 218

*Diaphanes brevisculus* (Kolbe, 1898 [sic]): McDermott 1966: 12

**Note.** McDermott's notecard had the incorrect date associated with this synonym.

#### ***Diaphanes piligerus* (Kolbe, 1897)**

*Lampyris piligera* Kolbe 1897: 218

*Diaphanes piligerus* (Kolbe, 1898 [sic]): McDermott 1966: 12

**Note.** McDermott's notecard had the incorrect date associated with this species.

#### ***Diaphanes planitianus* (Kolbe, 1897)**

*Lampyris planitiana* Kolbe 1897: 218

*Diaphanes planitianus* (Kolbe, 1898 [sic]): McDermott 1966: 13

**Note.** McDermott's notecard had the incorrect date associated with this species.

***Diaphanes rugicollis* (Fairmaire, 1887)***Lampyrus rugicollis* Fairmaire 1887: 155*Diaphanes volkensi* (Kolbe, 1897) [syn.]*Lampyrus volkensi* Kolbe 1897: 218*Diaphanes volkensi* (Kolbe, 1898 [sic]): McDermott 1966: 13

**Note.** McDermott had two notecards. One contained the correct date (Fig. 1c), and the second the incorrect date (Fig. 2a)

***Diaphanes signaticollis* Pic, 1951***Diaphanes signaticollis* Pic 1951: 217*Diaphanes signaticollis* Pic, 1950 [sic]: McDermott 1966: 13

**Note.** McDermott's notecard had the incorrect date associated with this species (Fig. 2b).

***Diaphanes ugandanus* (Kolbe, 1897)***Lampyrus ugandana* Kolbe 1897: 218*Diaphanes ugandanus* (Kolbe, 1898 [sic]): McDermott 1966: 14

**Note.** McDermott's notecard had the incorrect date associated with this species.

***Pyrocoelia iwasakii* (Matsumura, 1918)***Lucernula* [sic] *iwasakii* Matsumura 1918: 88*Lychnuris iwasakii* (Matsumura, 1928 [sic]): McDermott 1966: 16

**Note.** McDermott's notecard had the incorrect date associated with this species (Fig. 2c).

***Pyrocoelia tappana* (Matsumura, 1918)***Lucernula* [sic] *tappana* Matsumura 1918: 88*Lychnuris tappana* (Matsumura, 1928 [sic]): McDermott 1966: 18

**Note.** McDermott's notecard had the incorrect date associated with this species (Fig. 3a).

***Lamprocera latreillei* (Kirby, 1818)***Lampyrus latreillei* Kirby 1818: 387*Lamprocera latreillei* (Kirby, 1819 [sic]): McDermott 1966: 23

**Note.** Kirby's (1818) original name was deemed a patronym by subsequent authors, who spelled it "latreillei". This spelling has been used in all publications since 1818. In the interest of stability, we invoke ICZN (1999), Article 33.3.1, preserving use of "latreillei". McDermott's (1966) citing of 1819 for the description was based on a typographical error (Fig. 3b).

***Tenaspis semifusca* (Gorham, 1881)***Hyas semifusca* Gorham 1881: 31*Tenaspis semifusca* (Gorham, 1880 [sic]): McDermott 1966: 26

**Note.** McDermott cited the wrong article (Gorham 1880) (Fig. 3c). Lyal (2011) explains the publication dates for all volumes of the *Biologia Centrali-Americana*.

***Lucernuta savignii* (Kirby, 1818)***Lampyrus savignii* Kirby 1818: 388*Lucernuta savignii* (Kirby, 1819 [sic]): McDermott 1966: 26

**Note.** The description year of 1819 was based on a typographical error (Fig. 4a).

***Aspisoma candellarium* Reiche, 1845***Aspisoma candellarium* Reiche 1845: 353*Aspisoma candellarium* Reiche, 1843 [sic]: McDermott 1966: 30

**Note.** The description year of 1843 was based on a typographical error (Fig. 4b).

***Aspidosoma roseiventer* (E. Olivier, 1888)***Aspidosoma roseiventer* E. Olivier 1888: 50*Aspisoma roseiventer* E. Olivier, 1885 [sic]: McDermott 1966: 32

**Note.** The description year of 1885 was based on an incorrect citation. The Annales de la Société Entomologique de France 1885 contain no article by E. Olivier with a description of *Aspidosoma roseiventer*. A careful search through all publications by E. Olivier in 1885 as cited in Pic (1914) also resulted in no article containing the original description. The description of this species was in E. Olivier (1888).

***Pyractomena* Melsheimer, 1846***Pyractomena* Dejean 1833: 102 [*nomen nudum*]*Pyractomena* Melsheimer 1846: 304*Pyratomena* [sic] Melsheimer 1846: 304*Pyractomena* Melsheimer, 1845 [sic]: McDermott 1966: 32

**Note.** Based on text preceding Melsheimer's description, he presented the paper to the Academy of Natural Sciences on August 6<sup>th</sup> and September 27<sup>th</sup>, 1844. The article was printed in four parts in fascicle 5 (September and October, 1844), fascicle 6 (November and December, 1844), fascicle 8 (March and April, 1845), and fascicle 12 (November and December, 1845). Each fascicle contains meeting reports of the months stated in parentheses. The firefly descriptions are in fascicle 12, which was printed in 1846, not 1845, as the fascicle includes meeting reports of November and December 1845. In addition, Melsheimer attributed the genus name to Dejean, but had a typographical error and misspelled the name in the original description.

***Pyractomena angulata* (Say, 1825)***Lampyrus angulata* Say 1825: 162*Pyractomena flavocincta* LeConte, 1852 [syn.]*Pyractomena flavocincta* LeConte, 1851 [sic]: McDermott 1966: 33

**Note.** LeConte presented his paper to the Academy of Sciences of Philadelphia on December 30, 1851, but the proceedings were published by the Academy in 1852.

***Pyractomena angustata* LeConte, 1852***Pyractomena angustata* LeConte 1852: 336*Pyractomena angustata* LeConte, 1851 [sic]: McDermott 1966: 33

**Note.** LeConte presented his paper to the Academy of Sciences of Philadelphia on December 30, 1851, but the paper was published by the Academy in 1852. McDermott's notecard had the incorrect date associated with this species (Fig. 4c), and he used 1852 throughout the catalogue but for species in the genus *Pyractomena*.

***Pyractomena lucifera* Melsheimer, 1846***Pyratomena* [sic] *lucifera* Melsheimer 1846: 304*Pyractomena lucifera* Melsheimer, 1845 [sic]: McDermott 1966: 34

**Note.** Based on text preceding Melsheimer's description, he presented the paper to the Academy of Natural Sciences on August 6<sup>th</sup> and September 27<sup>th</sup>, 1844. The article was printed in four parts in fascicle 5 (September and October, 1844), fascicle 6 (November and December, 1844), fascicle 8 (March and April, 1845), and fascicle 12 (November and December, 1845). Each fascicle contains meeting reports of the



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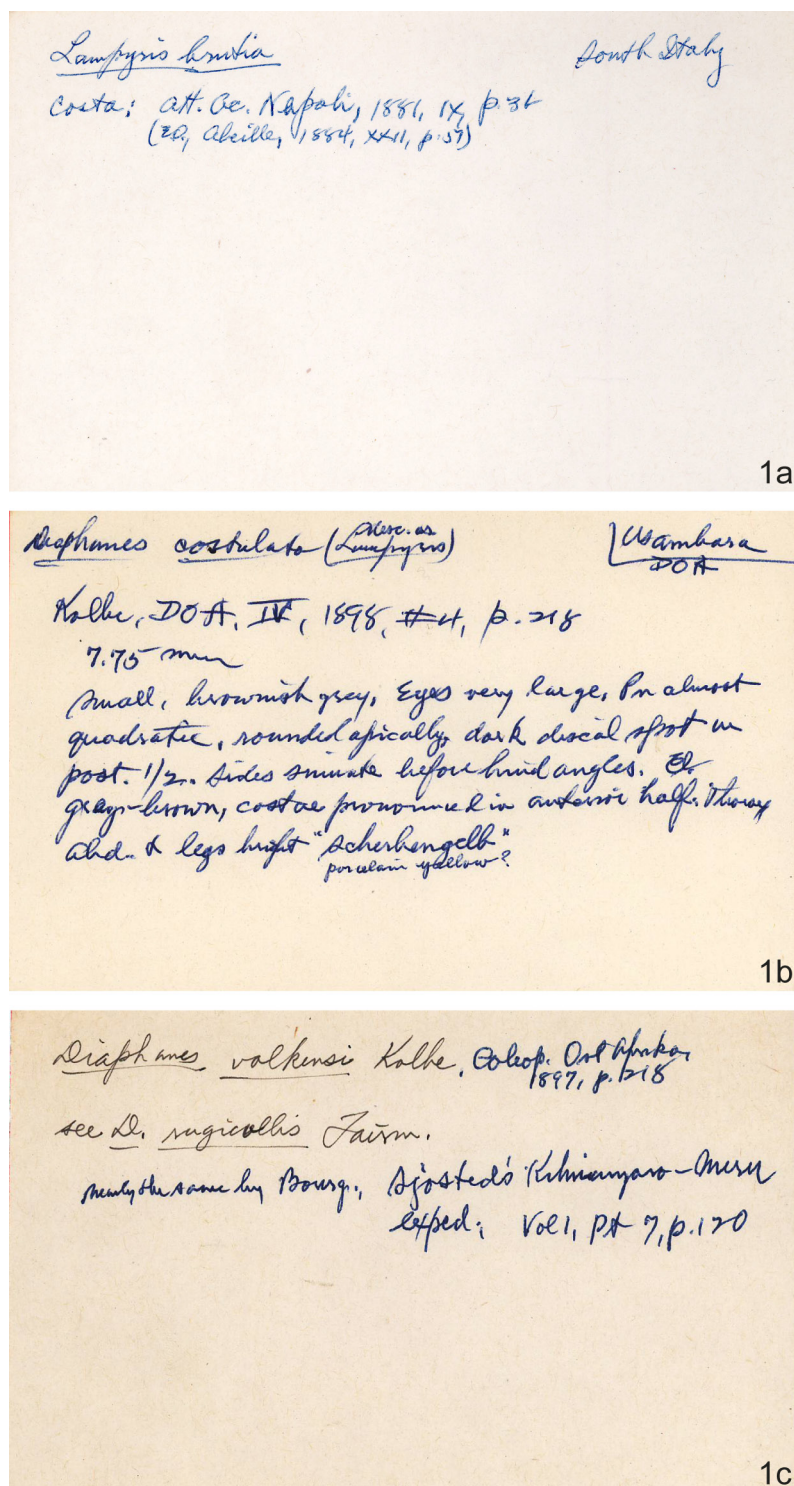
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**Figure 1.** McDermott's original handwritten literature notecards. **a)** Notecard showing the incorrect citation for *Lampyrus brutia*. **b)** Notecard showing the incorrect citation for *Diaphanes costulatus* (as an example for all Kolbe species in this paper). **c)** Notecard showing the correct citation for *Diaphanes volkensi*.

Diaphanes volkensis (desc as Kilmansgairi) = signaticollis Thurman Moschis,  
 Kolbe DOA, IV, 1898, #4, p. 318. [Aschagui found  
 Melbourn  
 DOA]  
 12-15 mm.  
 Larger than Kilmansgairi, duller colored. Black peritremal mark  
 smaller, quadratic or obliquely 4-corned, in dorsal 1/2.  
 El edge & suture lighter yellow. Entirely yellow below,  
 ends of femora, tibiae, & tarsi black.

2a

Diaphanes signaticollis Congo  
 Pic,  
 Mém. Inst. France, Afr. noire, Cent Cameroun  
 Soc. Nat., 1950, p. 217 (Z.R. 1951, p. 256)  
 on p. 120, Ref. 2275, it reads Mém. Inst. France,  
 Afr. noire, Cent Cameroun Donala Sci Nat;  
 No. 1, pp. 217-222.

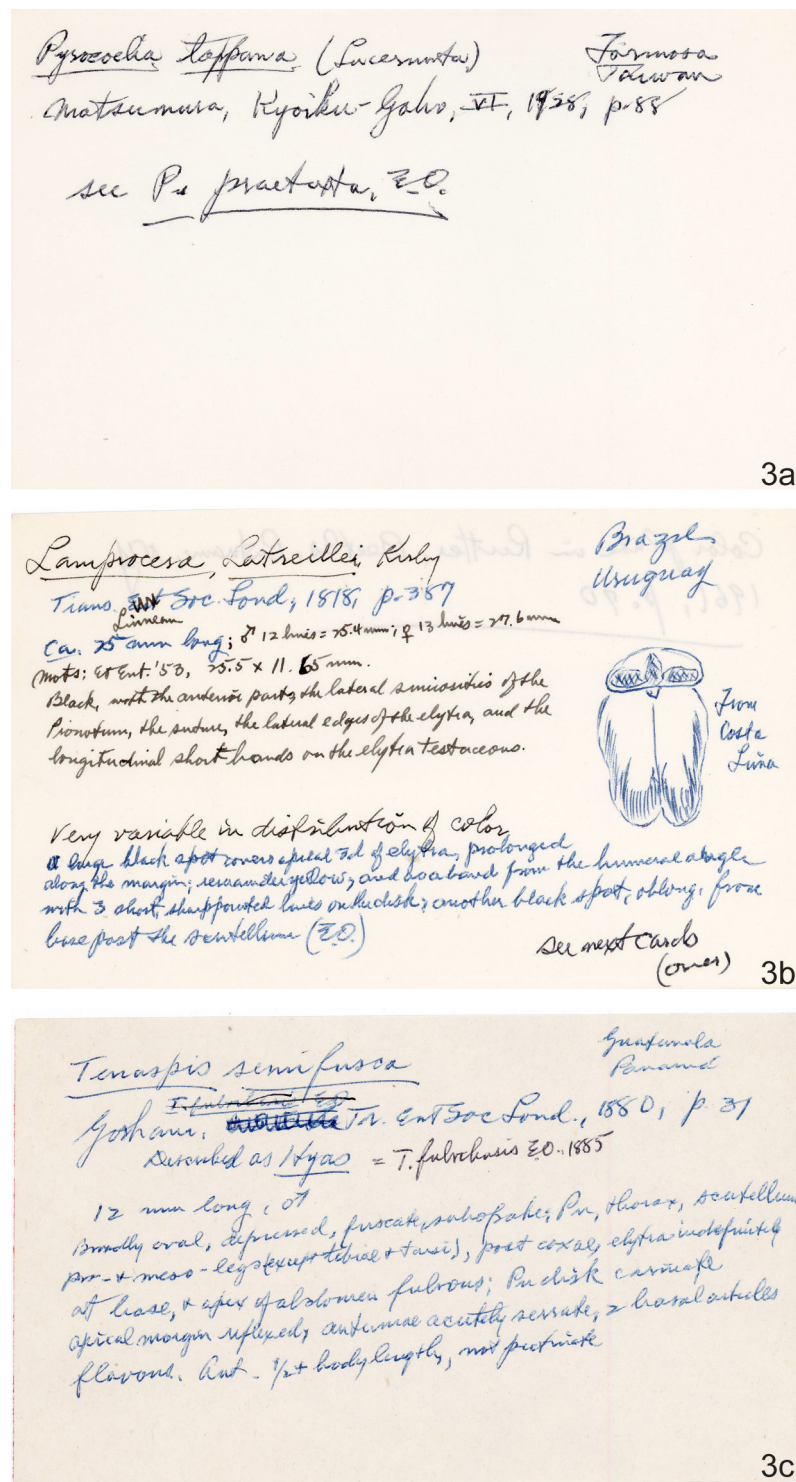
2b

Pyrocoelia iwasaki (Lucanota) Okinawa, Ish.  
 Matsuura, Shiuri  
 Ryukyu Isl.  
 Miyama Isl.  
 Kyō-ka-gakō, 1928, VI, #3, p. 88.

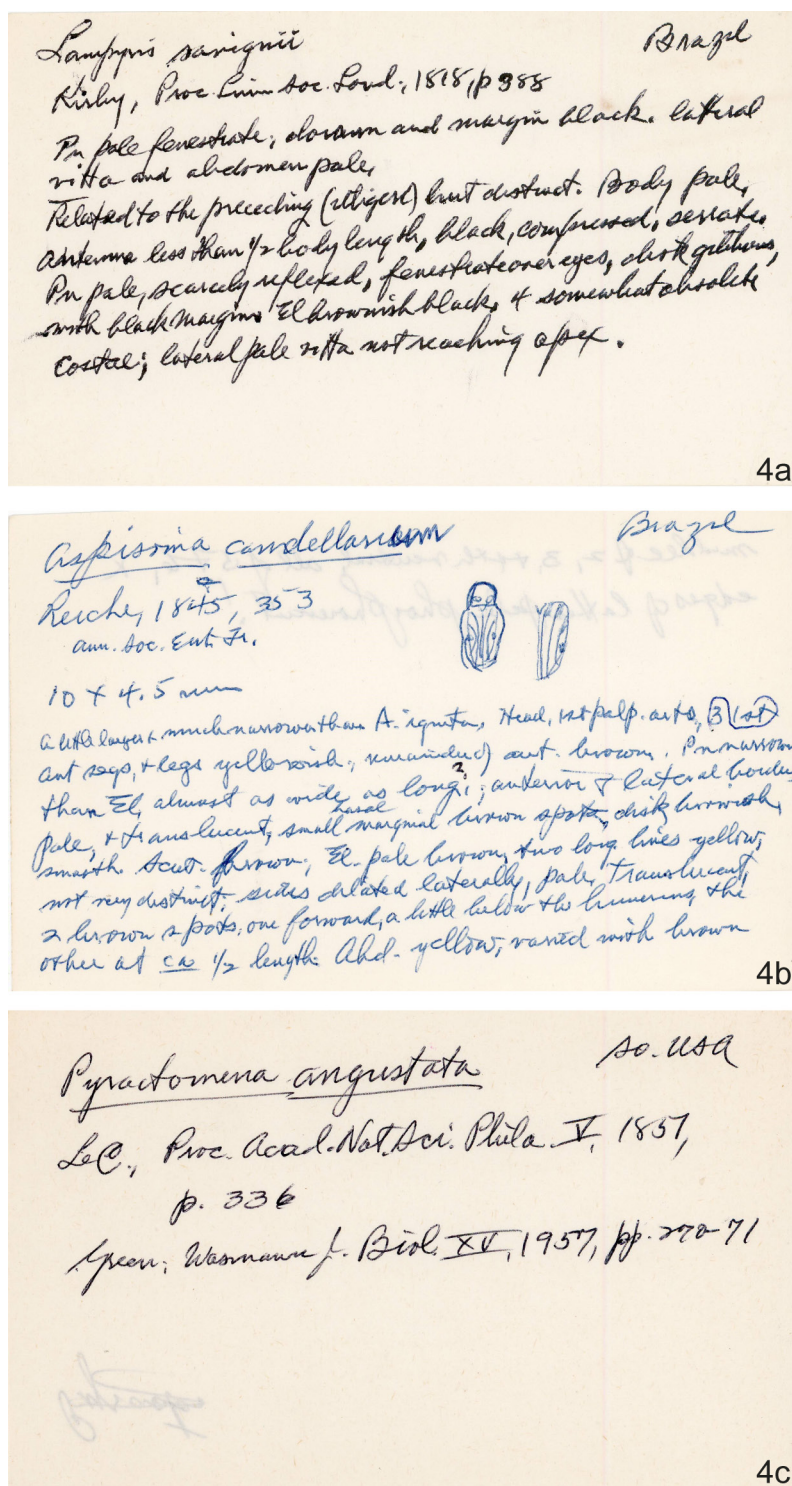
2c

**Figure 2.** McDermott's original handwritten literature notecards. **a)** Notecard showing the incorrect citation for *Diaphanes volkensis*. **b)** Notecard showing the incorrect citation for *Diaphanes signaticollis*. **c)** Notecard showing the incorrect citation for *Pyrocoelia iwasaki*.





**Figure 3.** McDermott's original handwritten literature notecards. **a)** Notecard showing the incorrect citation for the for *Pyrocoelia tappana*. **b)** Notecard showing the correct citation for *Lamprocera latreillei*. **c)** Notecard showing McDermott's incorrect citation for *Tenaspis semifusca*.



**Figure 4.** McDermott's original handwritten literature notecards. **a)** Notecard showing the incorrect citation for *Lucernuta savignii*. **b)** Notecard showing the correct citation for *Aspisoma candellarium*. **c)** Notecard showing the incorrect citation for *Pyractomena angustata*.