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Onciderini Thomson, 1860 (Coleoptera: Cerambycidae: Lamiinae) types of the Museum of Comparative Zoology (MCZ), with a brief history of the Coleoptera collection

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Abstract. The primary types of Onciderini Thomson, 1860 (Coleoptera: Cerambycidae: Lamiinae) of the Museum of Comparative Zoology (MCZ), Harvard University, are catalogued and illustrated. Data on the original combination, current name, gender, and type locality are verified and presented. There are 19 primary types of Onciderini including seven in *Oncideres* Lacordaire, 1830; two in *Hesychotypa* Thomson, 1868; and two in *Hypsioma* Audinet-Serville, 1835. Of the 19 primary types, 18 were described by L. S. Dillon and E. S. Dillon. A brief history of the Coleoptera collection at the MCZ is also presented.

Key Words. Catalog, holotypes, Neotropical.

Introduction

The tribe Onciderini Thomson, 1860 (Cerambycidae: Lamiinae) is widely distributed in the New World from North America to southern South America (Tavakilian and Chevillotte 2016; Monné 2017). Dillon and Dillon (1945, 1946) provided the only major revision of the tribe and Nearns and Swift (2011) provided a brief review of the taxonomic history of the tribe.

Recent work by Lingafelter et al. (2014), Nearns and Androw (2013), Nearns and Maier (2016), Nearns and Swift (2011), Nearns and Tavakilian (2012a, 2012b, 2015a, 2015b), Nearns and Santos-Silva (2016), and Nearns et al. (2011, 2014) has resulted in the photography of nearly all Onciderini primary type specimens. In this work, we present the 19 primary types of Onciderini deposited at the Museum of Comparative Zoology (MCZ), Harvard University. Among these are seven primary types in *Oncideres* Lacordaire, 1830; and two each in *Hesychotypa* Thomson, 1868 and *Hypsioma* Audinet-Serville, 1835. Nearly all (18 of 19) of the primary types were described by Lawrence S. Dillon and Elizabeth S. Dillon. A brief history of the MCZ Coleoptera collection is also presented.

A Brief History of the MCZ, with a Focus on Coleoptera

The origins of the Museum of Comparative Zoology at Harvard University can be traced to Louis Agassiz, a systematist, paleontologist, and teacher of natural history. In the mid-1840s, Agassiz visited Harvard from Switzerland, spending his time advocating for a new discipline called Comparative Zoology. He received support in the Boston area and began the process of acquiring collections and professionals interested in this field of study. The MCZ was founded in 1859 partially as the result of an act advocated by Agassiz through the Commonwealth of Massachusetts. The MCZ Entomology Collection was established that same year by A. S. Packard and S. Scudder.

Since 1859, the museum has grown to hold approximately 21 million specimens, with both extant and fossil specimens. Comprising over a third of the total museum holdings, seven million prepared

insect specimens make the MCZ entomological collection the 7th largest in North America. Although, with more than 33,000 primary types, the museum is second to only the National Museum of Natural History (Smithsonian Institution, Washington, DC, USA) for type richness in North America.

Coleoptera encompass almost half of both the MCZ general entomology holdings and total number of insect type specimens. The collections of Horn, J. L. LeConte, Melsheimer, Fall, Bowditch, and Darlington form the foundation of this type-rich environment (MCZ Website 2017). LeConte and Horn were contemporaries in the mid to late 1800s and shared material with each other throughout their respective careers. For almost a century the collections were separated, with the Horn material located at the Philadelphia Academy of Natural Sciences; however, the two sister collections were reunited at the MCZ as part of a large exchange between the two museums in the mid-1960s. Material collected by T. W. Harris predates even those specimens collected by LeConte and Horn and is considered the oldest undamaged North American synoptic collection remaining. Much of this collection was studied and determined by Thomas Say, whose own collection was unfortunately mostly destroyed (LeConte 1859). A small portion of this significant piece of American entomology now resides in the MCZ.

Unfortunately, many of the over 1,500 species Say described are not represented in the remains, this has led to many lectotype or neotype designations. Mawdsley (1993) outlined the history of the Thomas Say collection, along with detailed instructions for the designation of replacement type specimens. Fall was active in the early 1900s and amassed one of the largest and most complete North American beetle collections for his time. He also personally described approximately 1,400 new species, adding to the impressive concentration of primary types at this museum.

Important, taxonomically focused additions were made by both F. C. Bowditch and P. J. Darlington (MCZ Website 2017). The Bowditch material represents one of the largest and comprehensive chrysomelid collections in the world, including over 3,200 type specimens. This collection represents approximately 80% of the known genera and 50% of the described species prior to 1905. Darlington built one of the world's most important collections of Carabidae through his personal efforts and the acquisition of material from Knirsch, Andrews, and Lindroth. This collection became particularly rich in Neotropical and Austral-Oceanic material.

Materials and Methods

Type specimens are listed in alphabetical order by original combination. The text for each primary type is arranged as follows: the first line contains the original combination, author, year, and page number. This is followed by the figure number of the dorsal habitus and label images if available. The second line is the type of type (holotype, lectotype, or neotype) and gender if known. The third line is the type locality to the most specific level possible based on the label data, literature, and other data. Country and province/state are listed in most cases, even if these data are not present on the label or in the original literature. The fourth line is the current name, if different from the original combination, based on Bezark (2017), Monné (2017), and Tavakilian and Chevillotte (2016). In one instance, there is a "Remarks" section where additional information such as inconsistencies with the label(s), or other applicable historical information is presented. Details concerning specimens and label data can be seen in Fig. 1–19.

Photographs were taken with Visionary Digital's Passport Storm imaging system fitted with a Canon EOS 40D.

Primary Types of Onciderini Thomson, 1860

***Cacostola variegata* Dillon and Dillon, 1946: 260** (Fig. 1a, b)
Holotype, male
Type locality. French Guiana, Cayenne

Figures 1–6. Six species of Onciderini. **Fig. 1.** *Cacostola variegata* Dillon and Dillon (a, dorsal habitus; b, labels). **Fig. 2.** *Charoides antennata antennata* Dillon and Dillon (a, dorsal habitus; b, labels). **Fig. 3.** *Cylicasta nysa* Dillon and Dillon (a, dorsal habitus; b, labels). **Fig. 4.** *Hesycha crucifera* Dillon and Dillon (a, dorsal habitus; b, labels). **Fig. 5.** *Hesychotypa archippa* Dillon and Dillon (a, dorsal habitus; b, labels). **Fig. 6.** *Hesychotypa subfasciata* Dillon and Dillon (a, dorsal habitus; b, labels).

***Charoides antennata antennata* Dillon and Dillon, 1945: 71** (Fig. 2a, b)
Holotype, female
Type locality. French Guiana, Cayenne
Current name. *Tulcus tigrinatus* (Thomson, 1868)

***Cylicasta nysa* Dillon and Dillon, 1946: 274** (Fig. 3a, b)
Holotype, female
Type locality. Colombia, Magdalena, Aracataca

***Hesycha crucifera* Dillon and Dillon, 1952: 66** (Fig. 4a, b)
Holotype, male
Type locality. Brazil, Rio de Janeiro, Nova Friburgo
Remarks. The determination label (Fig. 4b) indicates that L. S. Dillon and E. S. Dillon identified this specimen as "*Hesycha paupercula*." Later, in their description of *Hesycha crucifera*, the same authors (Dillon and Dillon 1952) stated "an examination of a specimen compared to the type of *Hesycha paupercula* revealed that the species described in the above citation was not actually that form but a new species, which is herewith named. Holotype: Male, Nova Friburgo, R.J., Brazil; M.C.Z."

***Hesychotypa archippa* Dillon and Dillon, 1945: 165** (Fig. 5a, b)
Holotype, male
Type locality. Brazil
Current name. *Hesychotypa miniata* Thomson, 1868

***Hesychotypa subfasciata* Dillon and Dillon, 1945: 152** (Fig. 6a, b)
Holotype, male
Type locality. Brazil, Paraná, North Paraná

***Hypsioma attalia* Dillon and Dillon, 1945: 45** (Fig. 7a, b)
Holotype, female
Type locality. Brazil

***Hypsioma opalina* Dillon and Dillon, 1945: 44** (Fig. 8a, b)
Holotype, female
Type locality. Brazil, Rio de Janeiro

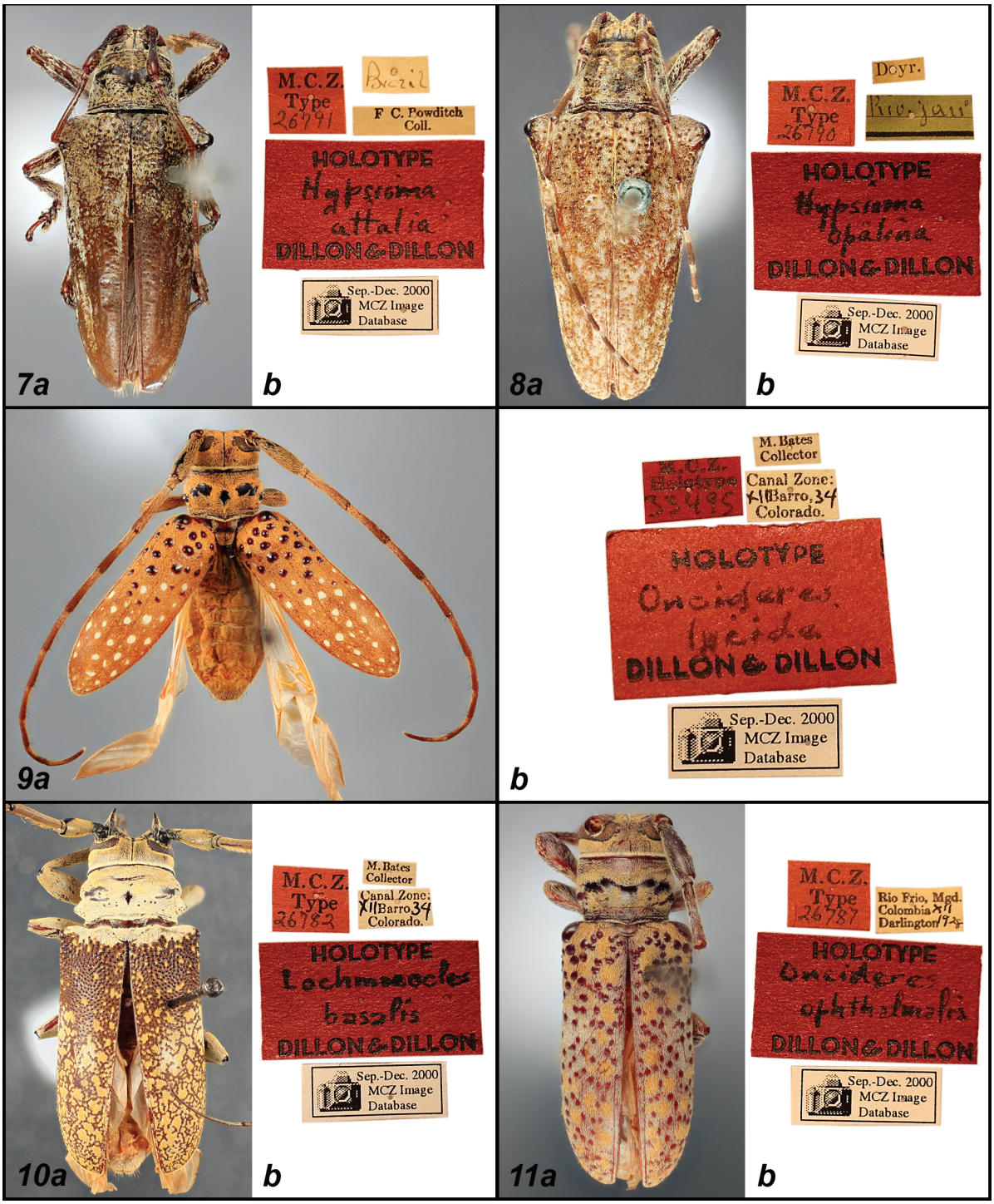
***Lochmaeocles basalis* Dillon and Dillon, 1946: 212** (Fig. 10a, b)
Holotype, male
Type locality. Panama, Canal Zone, Barro Colorado Island

***Oncideres lyside* Dillon and Dillon, 1949: 9** (Fig. 9a, b)
Holotype, male
Type locality. Panama, Canal Zone, Barro Colorado Island

***Oncideres ophthalmalis* Dillon and Dillon, 1946: 392** (Fig. 11a, b)
Holotype, male
Type locality. Colombia, Magdalena, Río Frío

***Oncideres poeta* Dillon and Dillon, 1949: 7** (Fig. 12a, b)
Holotype, female
Type locality. Panama, Canal Zone, Barro Colorado Island

***Oncideres pustulata* LeConte, 1854: 82** (Fig. 13a, b)
Holotype, female
Type locality. USA, Texas, Laredo



Figures 7–11. Five species of Onciderini. **Fig. 7.** *Hypsioma attalia* Dillon and Dillon (a, dorsal habitus; b, labels). **Fig. 8.** *Hypsioma opalina* Dillon and Dillon (a, dorsal habitus; b, labels). **Fig. 9.** *Oncideres lyside* Dillon and Dillon (a, dorsal habitus; b, labels). **Fig. 10.** *Lochmaeocles basalis* Dillon and Dillon (a, dorsal habitus; b, labels). **Fig. 11.** *Oncideres ophthalmalis* Dillon and Dillon (a, dorsal habitus; b, labels).

***Oncideres putator brevifasciata* Dillon and Dillon, 1946: 360** (Fig. 14a, b)
Holotype, male
Type locality. Panama, Canal Zone, Barro Colorado Island

***Oncideres saga colombiana* Dillon and Dillon, 1946: 324** (Fig. 15a, b)
Holotype, male
Type locality. Colombia, Magdalena, Río Frío
Current name. *Oncideres colombiana* Dillon and Dillon, 1946

***Oncideres sobrina* Dillon and Dillon, 1946: 354** (Fig. 16a, b)
Holotype, male
Type locality. Colombia, Magdalena, Río Frío

***Peritrox perbra* Dillon and Dillon, 1945: 93** (Fig. 17a, b)
Holotype, female
Type locality. French Guiana, Cayenne

***Trestonia confusa* Dillon and Dillon, 1946: 282** (Fig. 18a, b)
Holotype, male
Type locality. Costa Rica

***Tybalmia pixe* Dillon and Dillon, 1945: 179** (Fig. 19a, b)
Holotype, female
Type locality. Panama, Canal Zone, Barro Colorado Island

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Figures 12–17. Six species of Onciderini. **Fig. 12.** *Oncideres poeta* Dillon and Dillon (a, dorsal habitus; b, labels). **Fig. 13.** *Oncideres pustulata* LeConte (a, dorsal habitus; b, labels). **Fig. 14.** *Oncideres putator brevifasciata* Dillon and Dillon (a, dorsal habitus; b, labels). **Fig. 15.** *Oncideres saga colombiana* Dillon and Dillon (a, dorsal habitus; b, labels). **Fig. 16.** *Oncideres sobrina* Dillon and Dillon (a, dorsal habitus; b, labels). **Fig. 17.** *Peritrox perbra* Dillon and Dillon (a, dorsal habitus; b, labels).

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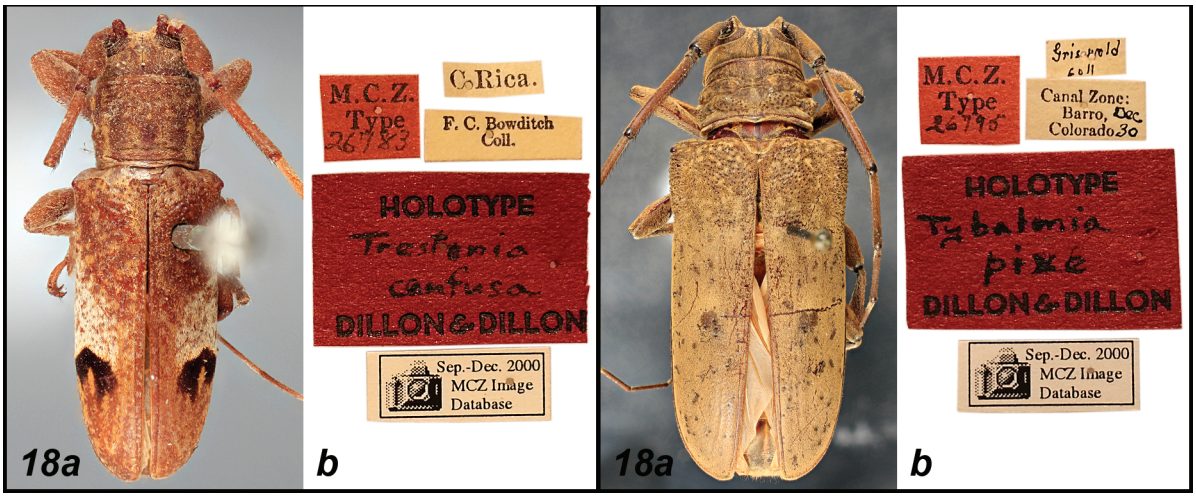

Figures 18–19. Two species of Onciderini. **Fig. 18.** *Trestonia confusa* Dillon and Dillon (a, dorsal habitus; b, labels). **Fig. 19.** *Tybalmia pixe* Dillon and Dillon (a, dorsal habitus; b, labels).