

Lectotype designations for Elateridae (Coleoptera) described by George C. Champion in the *Biologia Centrali-Americana*

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RESUMEN

Se designan lectotipos para 181 especies de Elateridae descritos por G.C. Champion in la *Biologia Centrali-Americana*. Se proporcionan nuevas reubicaciones genéricas para: *Aeolus flavipes* (Champion) **combinación nueva**, *A. meridionalis* (Champion) **combinación nueva**, *Paradonus quadriplagiatus* (Champion) **combinación nueva**, *P. quadrisignatus* (Champion) **combinación nueva**, *P. teapensis* (Champion) **combinación nueva**. *Cleidecosta* Johnson, **nombre nuevo**, es propuesto para remplazar a *Heligmus* Candèze. *Peralampes* Johnson, **nombre nuevo**, sustituye a *Alampes* Champion. *Cleidecostini*, **nombre nuevo**, es propuesto para remplazar a *Heligmini* es cual está basado en una homonimia junior. Finalmente, se proporciona un esquema de la clasificación de los taxones de México y Centro América, y se incluyen fotografías para 84 especies de la región.

ABSTRACT

Lectotype designations are given for 181 species of Elateridae described by G.C. Champion in the *Biologia Centrali-Americana*. New generic assignments are given for *Aeolus flavipes* (Champion) **new combination**, *A. meridionalis* (Champion) **new combination**, *Paradonus quadriplagiatus* (Champion) **new combination**, *P. quadrisignatus* (Champion) **new combination**, *P. teapensis* (Champion) **new combination**. *Cleidecosta* Johnson, **new name**, is presented to replace the preoccupied *Heligmus* Candèze. *Peralampes* Johnson, **new name**, is presented to replace the preoccupied *Alampes* Champion. *Cleidecostini*, **new name**, is presented to replace *Heligmini* which is based on a junior homonym. A classification of the Mexican and Central American taxa is presented. Images of 84 species from the region are presented.

The Elateridae fauna of southern North America, i.e. Mexico and Central America, is poorly described. Champion (1894-1896) provided original descriptions for a majority (56%) of taxa presently described or recorded from the region. Of 301 species of elaterids described by Champion from Mexico and Central America, 181 of these are represented by two or more specimens. The vast majority of the species described from the region have their type specimens deposited in The Natural History Museum, London. Here, the focus is on species described by Champion, all of which were described in the *Biologia Centrali-Americana* and most specimens are held at the London museum.

Champion did not designate primary types when authoring species and lectotype designations are needed for these 181 species. Unique specimens of species described by Champion and are holotypes by monotypy (ICZN 1999, Art. 72) are not included here. These specimens are readily recognized by the standardized labels noted below, Champion's indications of uniqueness, and a red bordered circular label with the word "type" printed.

Most of the specimens studied by Champion were not critically evaluated for taxonomic purposes since their description. A study of Champion's writing and examinations of specimens shows clearly that there are both a number of instances of syntypes derived from disparate

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geographic sites, those representing or potentially representing two or more species, and that syntypes of some species were distributed elsewhere. Further, there are non-syntype specimens that are often not conspecific but mixed with syntypes in some series and these should be unambiguously segregated. Thus, it was considered best to securely fix lectotypes for each species and to recognize paralectotypic specimens to prevent taxonomic conflicts in the future.

The specimens treated below were studied by Champion and bear standardized determination labels. These labels have "B.C.A. Col. III(I)" on the top line and the genus name printed immediately below. Specific epithets and an author abbreviation for each species were handwritten by Champion on the lower half of these labels. Frequently, the sex of the specimen was indicated with ♂ or ♀ symbols, when the sex was evident to Champion. A sample of Champion's handwriting is in Horn and Kahle (1935-1937; pl. 3, fig. 7), but incorrectly attributed to "G.E. Champion." Also, each specimen bears a circular curatorial label from the BMNH with a blue border and the word "syntype". A number of specimens were collected by C.F. Höge, but some labels use the transliteration Hoega.

Taxa are presented alphabetically with species assigned to contemporary genera. If a generic assignment has changed since description the original generic assignment is presented within brackets following the contemporary combination. Generic transfers made here are so indicated with a bold-faced "new combination" after the name.

Label data presented are restricted to the original locality and supplemental information labels applied by Champion or predecessors. The exception to this is that the country of origin is added within brackets because this information was not normally on the specimen labels, otherwise label information is presented as it appears on the labels. For purposes of brevity and clarity the standardized determination and type indication label information is not repeated here for each name. A slash (/) is used to separate information from different labels. "Same" means that the locality data is identical to that of the specimen immediately preceding. Numerals in parentheses and with museum codens refer to the number of specimens examined from each museum. Each specimen designated a lectotype bears my label. All specimens examined are in the collections of The Natural History Museum (BMNH), London, and the National Museum of Natural History (USNM), Washington, D.C.

FAMILY-GROUP AND GENUS NAME CHANGES

These obligatory changes are presented as they affect taxa recorded from the region.

Cleidecosta Johnson, **New Name**

This name is proposed to replace *Heligmus* Candèze (1857), which is preoccupied by *Heligmus* Dujardin (1845) in Nematoda, Heterocheilidae. This new name is a patronym in honor of Dr. Cleide Costa, São Paulo, and is in recognition of her extensive studies on the systematics and ecology of pyrophorine elaterids.

Cleidecostini Johnson, **New Name**

This new name, based on *Cleidecosta* Johnson, replaces Heligmini Costa based on *Heligmus* Candèze, which is preoccupied (see above). According to the ICZN, Art. 39 (1999), a family group name based on a genus name that is a junior homonym must be rejected and replaced.

Peralampes Johnson, **New Name**

Peralampes is proposed as a replacement name for *Alampes* Champion (1896), which is preoccupied by *Alampes* Horváth (1884) in the Hemiptera, Lygaeidae.

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LECTOTYPE DESIGNATIONS

Acanthathous aequinoctialis (Champion), 1896: 459 [*Athous*]

Lectotype here designated: [Guatemala] S. Geronimo, 3000 ft., Champion [♂]. Champion (1896) noted three specimens in his study. Three syntypes were seen by me. The two paralectotypes bear the labelling: Calderas, Guatemala, Champion (1, BMNH); Jalapa, Mexico, Hoege (1, BMNH).

Acanthathous angusticollis (Champion), 1896: 461 [*Athous*]

Lectotype here designated: Pinos Altos, Chihuahua, Mexico, Buchan-Hepburn [sex undetermined]. Champion (1896) noted his study of two specimens. Two syntypes were seen. The paralectotype is labeled: Rio Mescales, Mexico, Buchan-Hepburn.

Acanthathous aztecus (Champion), 1896: 460 [*Athous*]

Lectotype here designated: Jugula / Mexico, Sallé Coll. [♂]. Champion (1896) noted his study of two specimens. Two syntypes were seen. Paralectotypes are labeled identically to the lectotype.

Acanthathous carinicollis (Champion), 1896: 461 [*Athous*]

Lectotype here designated: [Mexico] Chilpancingo, Guerrero, 4600 ft., July, H.H. Smith [♂]. Champion (1896) noted his study of two specimens. Two syntypes were seen. The paralectotype is labeled: [Mexico] Omilteme, Guerrero, 8000 ft., Aug., H.H. Smith.

Acanthathous marcidus (Champion), 1896: 459 [*Athous*]

Lectotype here designated: Oaxaca, Mexico, Hoege [sex undetermined]. Champion (1896) noted his study of two specimens. Two syntypes were seen. Paralectotypes are labeled identically to the lectotype.

Acanthathous pachyderoides Champion, 1896: 462

Lectotype here designated: [Guatemala] Cerro Zunil, 4-5000 ft., Champion [♂]. Champion (1896) studied 10 specimens. I examined 10 syntypes. Paralectotypes are labeled identically to the lectotype.

Acanthathous photinoides (Champion), 1896: 457 [*Athous*]

Lectotype here designated: Tecpan, Guatemala, Conradt [♀]. Champion (1896) noted his study of 13 specimens. I examined 12 syntypes. Paralectotypes bear the labeling: same as lectotype (1, BMNH); [Guatemala] Totonicapam, 85-10,000 ft., Champion (10, BMNH). The disposition of a thirteenth syntype is unknown.

Acanthathous rugipennis (Champion), 1896: 460 [*Athous*]

Lectotype here designated: [Guatemala] Sinaloa, Vera Paz, Champion [sex undetermined]. Champion (1896) noted his study of three specimens. Three syntypes were seen. The paralectotypes are labeled "Purula, Vera Paz, Champion." Interestingly, the Sinaloa locality was not specifically listed by Champion, nor mentioned later (Champion 1907). Selander and Vaurie (1962) do not list a "Sinaloa" from Guatemala. I suspect that this may be labelling error.

Aeolus bimucronatus Champion, 1894: 360

Lectotype here designated: [Panama] Caldera, 1200 ft., Champion [♂]. Champion (1894) studied seven specimens. I examined six syntypes. Paralectotypes are labeled: [Panama] Bugaba, 800-1500 ft., Champion (4, BMNH), V. de Chiriqui, 2-3000 ft., Champion (1, BMNH). The disposition of the missing syntype is unknown.

Aeolus discoideus Champion, 1894: 373

Lectotype here designated: [Guatemala] Chiacaman, Vera Paz, Champion [sex undetermined]. Champion (1894) studied four specimens. I examined four syntypes. Paralectotypes are labeled: same as lectotype (2, BMNH), Cahabon, Vera Paz, Champion (1, BMNH).

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Aeolus fumatus Champion, 1894: 363

Lectotype here designated: [Guatemala] San Juan, Vera Paz, Champion [sex undetermined]. Champion (1894) studied seven specimens. I examined seven syntypes. Paralectotypes are labeled: same lectotype (5, BMNH), San Isidro, Guatemala, Champion (1, BMNH). Although Champion did not include the San Isidro locality in the description of this species, he did specifically mention seven specimens and one specimen from this locality and bearing his labels was seen. This specimen is herein treated as a syntype.

Aeolus haemorrhoidalis Champion, 1894: 364

Lectotype here designated: [Panama] V. de Chiriqui, 2-3000 ft., Champion [sex undetermined]. Champion (1894) studied four specimens. I examined four syntypes. Paralectotypes are labeled as the lectotype.

Aeolus hexastigma Champion, 1894: 361

Lectotype here designated: [Guatemala] Panzos, Vera Paz, Champion [sex undetermined]. Champion (1894) did not indicate the number of specimens studied. I examined 18 syntypes. Paralectotypes are labeled: same as lectotype (14, BMNH), Teleman, Vera Paz, Champion (1, BMNH).

Aeolus flavipes (Champion), 1894: 376 [*Drasterius*] **New Combination**

Lectotype here designated: [Mexico] Type / Mexico City, Höge [sex undetermined]. Champion (1894) studied two specimens. I examined one syntype. The disposition of the second specimen is unknown.

Aeolus meridionalis (Champion), 1894: 375 [*Drasterius*] **New Combination**

Lectotype here designated: [Panama] V. de Chiriqui, 2-3000 ft., Champion [sex undetermined]. Champion (1894) did not give the number of specimens studied. I examined syntypes that were determined by comparison of labels with localities presented in the description. Paralectotypes are not designated at this time due to a preliminary assessment that the syntype series is clearly composed of at least two species.

Aeolus testudineus Champion, 1894: 362

Lectotype here designated: [Guatemala] Paso Antonio, 400 ft., Champion [sex undetermined] [specimen on left of two on card]. Champion (1894) studied two specimens. I examined two syntypes mounted on a card. The paralectotype bears the same labels as the lectotype.

Aeolus trimaculatus Champion, 1894: 362

Lectotype here designated: [Panama] Bugaba, 800-1500 ft., Champion [sex undetermined]. Champion (1894) studied four specimens. I examined four syntypes. Paralectotypes are labeled: David, Panama, Champion (2, BMNH), Caldera, 1200 ft., Champion (1, BMNH).

Aeolus tripartitus Champion, 1894: 363

Lectotype here designated: Bugaba, Panama, Champion [♂]. Champion (1894) studied five specimens. I examined five syntypes. Paralectotypes are labeled as the lectotype.

Aeolus tropicalis Champion, 1894: 367

Lectotype here designated: [Guatemala] Teleman, Vera Paz, Champion [♂]. Champion (1894) did not note the number of specimens studied. I examined 13 syntypes. Paralectotypes are labeled: same as lectotype (10, BMNH), same, Chacoj (1, BMNH); [Mexico] Teapa, Tabasco, Höge (1, BMNH); [Belize] Brit. Honduras (Dyson), Coll Janson (1, BMNH).

Aeolus vermiculatus Champion, 1894: 372

Lectotype here designated: [Guatemala] Teleman, Vera Paz, Champion [♂]. Champion (1894) did not indicate the number of specimens studied. I examined 34 syntypes that were determined by

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comparison of labels with localities presented in the description. Paralectotypes are not designated at this time due to a preliminary assessment that the syntype series is clearly composed of no fewer than two species.

Agriotes acutus Champion, 1896: 519

Lectotype here designated: [Panama] V. de Chiriqui, below 4000 ft., Champion [sex undetermined]. Champion (1896) studied eight specimens. I examined eight syntypes. Paralectotypes are labeled: same as lectotype, 2-3000 ft. (4, BMNH), same, 3-4000 ft. (1, BMNH), same, 25-4000 ft. (1, BMNH); Chontales, Nicaragua, T. Belt (1, BMNH).

Agriotes binotatus Champion, 1896: 524

Lectotype here designated: [Guatemala] Sinanja, Vera Paz, Champion [sex undetermined]. Champion (1896) studied four specimens. I examined four syntypes. Paralectotypes are labeled identically to the lectotype.

Agriotes cinereiventris Champion, 1896: 526

Lectotype here designated: [Mexico] Chilpancingo, Guerrero, 4600 ft., July, H.H. Smith [sex undetermined]. Champion (1896) noted that four specimens were studied by him. I examined four syntypes. Paralectotypes are labeled identically to the lectotype.

Agriotes cruciatus Champion, 1896: 528

Lectotype here designated: [Guatemala] Chiacaman, Vera Paz, Champion [♂]. Champion (1896) did not note the number of specimens that he studied. I examined 17 syntypes. Paralectotypes are labeled: same as lectotype (14, BMNH); [Guatemala] Coban, Vera Paz, Conradt (2, BMNH). Champion (1896, 1907) used the spelling "Chiacam" and Selander and Vaurie (1962) indicate "Chiacaman" as a variant spelling for this locality.

Agriotes curticolis Champion, 1896: 525

Lectotype here designated: [Costa Rica] Irazu, 6-7000 ft., H. Rogers [♀]. Champion (1896) studied two specimens. I examined two syntypes. The paralectotype is labeled: [Panama] V. de Chiriqui, 4000-6000 ft., Champion. Champion (1896) gave the Costa Rican locality as "Volcan de Irazu 6000 feet."

Agriotes guatemalensis Champion, 1896: 530

Lectotype here designated: Capetillo, Guatemala, G.C. Champion [sex undetermined]. Champion (1896) noted his study of eight specimens. I examined eight syntypes. Paralectotypes are labeled identically to the lectotype.

Agriotes hirsutus Champion, 1896: 531

Lectotype here designated: [Mexico] Ciudad, Durango, Höge [♂]. Champion (1896) stated that he examined "one pair" of specimens, a male and a female. Both specimens are presumably labeled identically. Only the male specimen was seen by me. The disposition of the female paralectotype is unknown.

Agriotes incallidus Champion, 1896: 529

Lectotype here designated: Cordova, Mexico, Sallé Coll. [sex undetermined]. Champion (1896) did not indicate the number of specimens that he studied. I examined 15 syntypes. Paralectotypes are labeled: same as the lectotype (6, BMNH); Jalapa, Mexico, Hoege (4, BMNH), Mexico (2, BMNH); [Guatemala] Coban, Vera Paz, Conradt (1, BMNH), same, Cordova (1, BMNH); Coll. Janson ex Candeze (1, BMNH). Champion (1896) noted that one of the Mexican specimens was labeled "Agriotes incallidus", apparently in Candèze's hand, but this label was not seen in the series examined.

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Agriotes insolitus Champion, 1896: 526

Lectotype here designated: [Mexico] Zacualtipan, Hidalgo, Höge [sex-undetermined]. Champion (1896) did not indicate the number of specimens that he studied. Nine syntypes were seen by me. Paralectotypes are labeled: same as lectotype (3, BMNH), Real de Monte, Hidalgo, Höge (3, BMNH), Mex., Deyr / 258 / Coll. Janson, ex Laferte (1, BMNH), nov. sp. / Coll. Janson, ex Dejean / not named by Candeze / *Athous insolitus* mihi Mexico D. Sommer (1, BMNH).

Agriotes mexicanus Champion, 1896: 530

Lectotype here designated: Jalapa, Mexico, Hoegé [sex undetermined]. Champion (1896) noted four specimens for his study. I examined four syntypes. Paralectotypes are labeled: same as lectotype (1, BMNH), Mexico / Sallé coll. (2, BMNH).

Agriotes mixtus Champion, 1896: 532

Lectotype here designated: [Mexico] Chilpancingo, Guerrero, 4600 ft., July, H.H. Smith [♂]. Champion (1896) noted his study of eight specimens. I examined six syntypes. Paralectotypes are labeled: same as lectotype (4, BMNH), Xucumanatlan, Guerrero, 7000 ft., July, H.H. Smith (1, BMNH). The disposition of two missing syntypes is unknown. An associated specimen is labeled "Ciudad, Durango, Höge" but this is not a location given by Champion and is not a syntype.

Agriotes opacicollis Champion, 1896: 531

Lectotype here designated: Zapote, Guatemala, G.C. Champion [sex undetermined]. Champion (1896) noted the study of 23 specimens. Only 16 syntypes were seen by me. Paralectotypes are labeled identically to the lectotype. The disposition of seven syntypes is unknown.

Agriotes pauxillus Champion, 1896: 532

Lectotype here designated: Capulalpam / Mexico, Sallé Coll. [sex undetermined]. Champion (1896) noted that 10 specimens were examined. Nine specimens were seen by me. Paralectotypes are labeled: same as lectotype (3, BMNH), Yolos / Mexico, Sallé Coll. (3, BMNH), Mexico (1, BMNH), Mexico / Coll. Janson ex Laferté (1, BMNH). The disposition of the tenth syntype is unknown.

Agriotes pectoralis Champion, 1896: 519

Lectotype here designated: Capetillo, Guatemala, G.C. Champion [sex undetermined]. Champion (1896) noted two specimens were seen by him. I examined two syntypes. The paralectotype is labeled the same as the lectotype.

Agriotes quadraticollis Champion, 1896: 525

Lectotype here designated: [Guatemala] S. Geronimo, 3000 ft., Champion [♀]. Champion (1896) noted eight specimens were studied and gave the San Gerónimo locality, along with "Capetillo", also in Guatemala. However, only seven specimens were seen by me and six were labeled "Duenas, Guatemala, G.C. Champion." Champion was a generally careful worker and this is the gravest potential mislabeling or typographic error discovered in his elaterid collection. These specimens are conspecific with the lectotype and are labeled from a locality near to both the type locality and the second locality given by Champion. I am recognizing these latter six specimens as syntypes.

Agriotes trilineatus Champion, 1896: 523

Lectotype here designated: Nicaragua / Chontales, Nicaragua, Janson / Coll. Janson [sex undetermined]. Champion (1896) noted his study of two specimens. I examined two syntypes. The paralectotype is labeled as the lectotype.

Agriotes trivittatus Champion, 1896: 520

Lectotype here designated: Chontales, Nicaragua, T. Belt [♂]. Champion (1896) studied two specimens. The paralectotype is labeled: Nicaragua / Sallé Coll.

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Anchastomorpha quadriguttatus Champion, 1895: 401

Lectotype here designated: [Guatemala] Cubilquitz, Vera Paz, Champion [sex undetermined]. Champion (1895) studied 10 specimens. I examined 10 syntypes. Paralectotypes are labeled: same as lectotype (1, BMNH), same, Lanquin, Vera Paz, Champion (1, BMNH), same, Tactic (1, BMNH), same, San Juan (4, BMNH), same, Tamahu (2, BMNH).

Anchastus bilineatus Champion, 1895: 395

Lectotype here designated: Bugaba, Panama, Champion [sex undetermined]. Champion (1895) noted his study of five specimens. I examined five syntypes. Paralectotypes are labeled: same as lectotype (1, BMNH); [Panama] V. de Chiriqui, 2-3000 ft., Champion (3, BMNH).

Anchastus discoideus Champion, 1895: 392

Lectotype here designated: [Mexico] Acapulco, Guerrero, Höge [♂]. Champion (1895) noted two specimens. I examine two syntypes. The paralectotype is labeled the same as the lectotype.

Anchastus diversus Champion, 1895: 393

Lectotype here designated: Chontales, Nicaragua, T. Belt [♂]. Champion (1895) noted his study of two specimens. I examined two syntypes. The paralectotype is labeled as the lectotype.

Anchastus flavovittatus Champion, 1895: 396

Lectotype here designated: Chontales, Nicaragua, T. Belt [sex undetermined]. Champion (1895) studied eight specimens representing three color varieties. I examined eight syntypes. Paralectotypes are labeled: Oaxaca, Mexico, Hoege (1, BMNH); [Mexico] Tapachula, Chiapas, Höge (2, BMNH); [Guatemala] Panzos, Vera Paz, Champion (1, BMNH); Zapote, Guatemala, G.C. Champion (1, BMNH); [Guatemala] Teleman, Vera Paz, Champion (1, BMNH); [Guatemala] San Juan, Vera Paz, Champion (1, BMNH).

Anchastus melanurus Champion, 1895: 394

Lectotype here designated: [Panama] Bugaba, 800-1500 ft., Champion [♀]. Champion (1895) studied two specimens. I examined two syntypes. The paralectotype is labeled: Bugaba, Panama, Champion.

Anchastus ruficollis Champion, 1895: 391

Lectotype here designated: Cerro de Plumas, Mexico, Hoege [♂]. Champion (1895) studied two specimens. I examined three specimens of which two are syntypes. The paralectotype bears the same labeling as the lectotype. The third specimen is labeled "22810 / Truqui, Mexico / Frey Coll 1905-100" and is not a syntype.

Anchastus sanguineus Champion, 1895: 391

Lectotype here designated: [Mexico] Teapa, Tabasco, Feb., H.H.S. [♂]. Two specimens were studied by Champion (1895). I examined two syntypes. The paralectotype bears the labeling: Coll Janson / ♀ / *Anchastus* sp. nov. / *Anchastus* / Vera Cruz, Mexico.

Anchastus seminiger Champion, 1895: 394

Lectotype here designated: Bugaba, Panama, Champion [♂]. Champion (1895) studied two specimens. Two syntypes were seen: The paralectotype is labeled identically to the lectotype.

Anoplischiopsis bivittatus Champion, 1895: 302

Lectotype here designated: [Panama] V. de Chiriqui, 2-3000 ft., Champion [♂]. Champion (1895) did not indicate the number of specimens studied. I examined 16 syntypes. Paralectotypes are labeled: same as lectotype (6), same, below 4000 ft. (7), same, 25-4000 ft. (2, BMNH). An associated specimen is labeled "Abugaba, Panama, Champion", but this specimen is not a syntype.

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Anoploschiopsis flavovittatus Champion, 1895: 302

Lectotype here designated: [Panama] San Miguel, Pearl Isl., Champion [♂] [specimen on left of two mounted on card]. Champion (1895) noted his study of two specimens. I examined two syntypes. The paralectotype is labeled the same as the lectotype.

Anoploschiopsis luteus Champion, 1895: 304

Lectotype here designated: [Panama] V. de Chiriqui, 25-4000 ft., Champion [♂]. Champion (1895) noted that four specimens were studied. All were seen by me. Paralectotypes are labeled: same as lectotype (1, BMNH), same, 2-3000 ft. (1, BMNH), same, below 4000 ft. (1, BMNH). An associated specimen at the BMNH is labeled "Nicaragua / Chontales, Nicaragua, Janson" is not a syntype.

Anoploschiopsis trinotatus Champion, 1896: 555

Lectotype here designated: Chontales, Nicaragua, T. Belt [♀]. Champion (1896) noted that two specimens were studied by him. I examined two syntypes. The paralectotype is labeled: Nicaragua / Sallé coll. An associated specimen labeled "Chontales / Sharp coll. 1905-313" is not a syntype.

Anoploschius chalcopterus Champion, 1895: 308

Lectotype here designated: [Guatemala] Cerro Zunil, 4-5000 ft, Champion [♂]. Champion (1895) noted his study of 13 specimens. I examined 13 syntypes. All paralectotypes are labeled the same as the lectotype.

Anoploschius elegans Champion, 1895: 312

Lectotype here designated: [Panama] V. de Chiriqui, 2-3000 ft., Champion [♂] [specimen on left of two mounted on card]. Champion (1895) did not indicate the number of specimens studied. I examined 13 syntypes. Paralectotypes are labeled: same as lectotype (7, BMNH), same, 25-4000 ft. (2, BMNH), same, 3-4000 ft. (1, BMNH); Bugaba, Panama, Champion (2, BMNH).

Anoploschius flavicollis Champion, 1895: 313

Lectotype here designated: [Mexico] Omilteme, Guerrero, 8000 ft., Aug., H.H. Smith [sex undetermined]. Champion (1895) noted his study of two specimens. I examined two syntypes. The paralectotype bears the same labels as the lectotype.

Anoploschius foveifrons Champion, 1895: 315

Lectotype here designated: Panama, Salvin [♂]. Champion (1895) studied two specimens. I examined two syntypes. The paralectotype is labeled: Mexico / Mexico, Coll. Janson. Champion noted that the Panamanian specimen was from "Obispo."

Anoploschius fuvus Champion, 1895: 310

Lectotype here designated: [Guatemala] Senahu, Vera Paz, Champion [♂]. Champion (1895) note his study of three specimens. Three syntypes were examined by me. Paralectotypes are labeled as the lectotype.

Anoploschius lineatus Champion, 1895: 313

Lectotype here designated: Chontales, Nicaragua, Janson / Coll. Janson [♂]. Champion (1895) noted his study of three specimens. Three syntypes were examined by me. Paralectotypes are labeled: Bugaba, Panama, Champion (2, BMNH).

Anoploschius maculicollis Champion, 1895: 311

Lectotype here designated: [Mexico] Chilpancingo, Guerrero, 4600 ft., July, H.H. Smith [♂]. Champion (1895) studied two specimens. I examined two syntypes. The paralectotype is labeled: [Mexico] Omilteme, Guerrero, 8000 ft, July, H.H. Smith.

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Anoplisthius mexicanus Champion, 1895: 309

Lectotype here designated: Cordova / Mexico, Sallé coll. [♂]. Champion (1895) studied two specimens. I examined two syntypes. The paralectotype is labeled: Mexico, Coll. Janson / ex Deyrolle Coll. Janson. An associated specimen in the BMNH labeled "[Guatemala] Senahu, Vera Paz, Champion" was not cited by Champion and is not a syntype.

Anoplisthius pallidus Champion, 1895: 315

Lectotype here designated: [Panama] Bugaba, 800-1500 ft., Champion [♂]. Champion (1895) studied seven specimens. I examined seven syntypes. Paralectotypes are labeled identically to the lectotype.

Anoplisthius parvulus Champion, 1895: 306

Lectotype here designated: [Guatemala] Cubilguitz, Vera Paz, Champion [♂]. Champion (1895) studied three specimens. I examined three syntypes. Paralectotypes are labeled identically to the lectotype.

Anoplisthius piliger Champion, 1895: 306

Lectotype here designated: [Guatemala] Sinanja, Vera Paz, Champion [♀]. Champion (1895) studied three specimens. I examined three syntypes. Paralectotypes are labeled: same as lectotype (1, BMNH), [Guatemala] Saba, Vera Paz, Champion (1, BMNH).

Anoplisthius sanguinicornis Champion, 1895: 314

Lectotype here designated: [Guatemala] Senahu, Vera Paz, Champion [♂]. Champion (1895) did not indicate the number of specimens studied. I examined 17 syntypes. Paralectotypes bear labeling identical to the lectotype.

Anoplisthius sobrinus Champion, 1895: 309

Lectotype here designated: [Panama] Bugaba, 800-1500 ft., Champion [♂]. Champion (1895) studied three specimens. I examined three syntypes. Paralectotypes bear labeling identical to the lectotype.

Anoplisthius variabilis Champion, 1895: 310

Lectotype here designated: [Belize] Brit. Honduras (Dyson), Coll. Janson [♂]. Champion (1895) did not indicate the number of specimens studied. I examined 15 syntypes. Paralectotypes are labeled: [Guatemala] San Juan, Vera Paz, Champion (4, BMNH), Pancina, Vera Paz, Champion (1, BMNH), Senahu, Vera Paz, Champion (1, BMNH); [Panama] V. de Chiriqui, 2-3000 ft., Champion (6, BMNH; 1, USNM); and, same, 25-4000 ft. (1, BMNH). The "Pancina" locality was given as "Panima" by Champion, while Selander and Vaurie (1962) note that "Panimá" in Baja Verapaz, Guatemala, is the correct spelling and location.

Aptopus chiriquensis Champion, 1895: 421

Lectotype here designated: [Panama] V. de Chiriqui, below 4000 ft., Champion [♂]. Champion (1895) did not note the number of specimens that he studied. I examined 14 syntypes. Paralectotypes are labeled: [Panama] V. de Chiriqui, 2-3000 ft., Champion (5, BMNH; 1, USNM), same, 3-4000 ft. (4, BMNH), same, 25-4000 ft. (3, BMNH).

Aptopus collaris Champion, 1895: 419

Lectotype here designated: Dueñas, Guatemala, G.C. Champion [♂]. Champion (1895) studied 10 specimens. I examined nine syntypes. Paralectotypes are labeled: same as lectotype (4, BMNH); Chimaltenango, Guatemala, Conradt (1, BMNH); San Geronimo, Guatemala, Champion (2, BMNH); Guatemala, 5000 (1, BMNH). The disposition of the tenth syntype is unknown.

Aptopus erichsoni Champion, 1895: 423

Lectotype here designated: [Mexico] Chilpancingo, Guerrero, Hoegge [♂]. Champion (1895) studied specimens. I examined 13 syntypes. Paralectotypes are labeled: same as lectotype (9, BMNH); Jalapa, Mexico, Hoegge (3, BMNH). The disposition of two syntypes is unknown.

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Aptopus longicollis Champion, 1895: 420

Lectotype here designated: [Mexico] Amula, Guerrero, 6000 ft., Aug., H.H. Smith [sex undetermined]. Champion (1895) did not note the number of specimens studied. I examined nine syntypes. Paralectotypes are labeled: same as lectotype (2, BMNH); Jalapa, Mexico, Hoeg (1, BMNH); Panistlahuaca, Mexico, Sallé Coll. (2, BMNH); Juquila / Sallé Coll. (3, BMNH).

Aptopus omiltemanus Champion, 1895: 425

Lectotype here designated: [Mexico] Omilteme, Guerrero, 8000 ft., Aug., H.H. Smith [♂]. Champion (1895) studied three specimens. I examined only one syntype, here chosen as the lectotype. Two syntypes are missing and they should bear labels identical to the lectotype.

Aptopus uniformis Champion, 1895: 424

Lectotype here designated: [Mexico] Chilpancingo, Guerrero, 4600 ft., July, H.H. Smith [sex undetermined]. Champion (1895) studied five specimens. I examined five syntypes. The paralectotypes are labeled: same as lectotype (3, BMNH), Guanajuato, Mexico, Sallé Coll. / 1694 (1, BMNH).

Aptopus vicinus Champion, 1895: 421

Lectotype here designated: Dueñas, Guatemala, G. C. Champion [♂]. Champion (1895) did not note the number of specimens studied. I examined 26 syntypes. Paralectotypes are labeled: same as lectotype (8, BMNH); Zapote, Guatemala, Champion (7, BMNH); same, S. Geronimo (5, BMNH); Tecpan, Guatemala, Conradt (1, BMNH); [Guatemala] Dueñas, 4950 (1, BMNH); [Guatemala] Chinautla, 4100 (1, BMNH); [Guatemala] Guatemala, 5000 (2, BMNH).

Athous funestus Champion, 1896: 461

Lectotype here designated: Ciudad, Mex., 8100 ft., Forrer [♂]. Champion (1896) noted his study of three specimens. Three syntypes were seen. Paralectotypes are labeled identically to the lectotype.

Atractosomus cribricollis Champion, 1895: 300

Lectotype here designated: Chontales, Nicaragua, Janson [sex not determined]. Champion (1895) noted five specimens were before him. Three syntypes were examined by me. Paralectotypes are labeled: same, T. Belt (1, BMNH); [Panama] Bugaba, 800-1500 ft., Champion (1, BMNH). Two additional specimens in the BMNH are labeled "Costa Rica, 93-69, 353" but these are not syntypes. The disposition of two syntypes is unknown.

Atractosomus fusiformis Champion, 1895: 299

Lectotype here designated: [Panama] V. de Chiriqui, 2-3000 ft., Champion [sex undetermined]. Champion (1895) noted that three specimens were studied. I examined three syntypes. Paralectotypes are labeled: same as lectotype (1, BMNH), same, 25-4000 ft. (1, BMNH).

Atractosomus mucronatus Champion, 1895: 299

Lectotype here designated: [Guatemala] Cerro Zunil, 4000 ft., Champion [♂]. Champion (1895) noted that he studied five specimens. I examined five syntypes. Paralectotypes are labeled: same as lectotype (1, BMNH), same, 4-5000 ft. (3, BMNH).

Cardiorhinus binotatus Champion, 1896: 495

Lectotype here designated: Chontales, Nicaragua, T. Belt [sex undetermined]. Champion (1896) noted his study of seven specimens. I examined seven syntypes. Six paralectotypes labeled: same as lectotype (5, BMNH); Nicaragua / Sallé Coll. (1, BMNH). Two additional specimens in the BMNH are labeled "Chontales / Sharp Coll. 1905-313"; these are not syntypes.

Chalcolepidius murinus Champion, 1894: 283

Lectotype here designated: [Mexico] Acapulco, Guerrero, Höge [♂]. Champion (1894) studied three

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specimens. I examined three syntypes. Paralectotypes bear the same labeling as the lectotype.

- Conoderus angusticollis* (Champion), 1895: 347 [*Monocrepidius*]
Lectotype here designated: [Mexico] Ciudad, Durango, 8100 ft., Forrer [♂]. Champion (1895) studied two specimens. Two syntypes were seen by me. The paralectotype is labeled as the lectotype.
- Conoderus bipustulatus* (Champion), 1895: 352 [*Monocrepidius*]
Lectotype here designated: [Guatemala] Telemán, Vera Paz, Champion [♀]. Champion (1895) noted that 12 specimens were studied by him. Twelve syntypes were seen by me. Paralectotypes are labeled: same as lectotype (6), Chacoj, Vera Paz, Champion (1, BMNH); Chontales, Nicaragua, Janson (2, BMNH), same, T. Belt (1, BMNH); Bugaba, Panama, Champion (1, BMNH).
- Conoderus inconstans* (Champion), 1895: 351 [*Monocrepidius*]
Lectotype here designated: [Guatemala] Rio Naranjo, 450 ft., Champion [♂]. Champion (1895) noted seven specimens were studied by him. I examined seven syntypes. Paralectotypes are labeled: Zapote, Guatemala, Champion (1, BMNH), [Mexico] Teapa, Tabasco, April, H.H.S. (3, BMNH), Puebla / Mexico, Sallé coll. (2, BMNH).
- Conoderus parvulus* (Champion), 1895: 356 [*Monocrepidius*]
Lectotype here designated: Orizaba, Mexico, Coll. Janson [sex undetermined]. Champion (1895) studied two specimens. Two syntypes were seen by me. The paralectotype is labeled: Cordova / Mexico Sallé coll.
- Conoderus rubidus* (Champion), 1895: [*Monocrepidius*]
Lectotype here designated: [Mexico] Ventanas, Durango, Höge [♂]. Champion (1895) did not indicate the number of specimens studied. I examined 14 syntypes. Paralectotypes are labeled as the lectotype.
- Conoderus rugicollis* (Champion), 1895: 349 [*Monocrepidius*]
Lectotype here designated: [Guatemala] Cerro Zuni, Champion [sex undetermined]. Champion (1895) studied two specimens. Two syntypes were seen by me. The paralectotype is labeled: [Guatemala] Pantaleon, 1700 ft., Champion.
- Conoderus sexpustulatus* (Champion), 1895: 355 [*Monocrepidius*]
Lectotype here designated: S. Geronimo, Guatemala, Champion [sex undetermined]. Champion (1895) did not indicate the number of specimens that he examined. I examined 16 syntypes. Paralectotypes are labeled: same as lectotype (4, BMNH), Zapote, Guatemala, Champion (5, BMNH); David, Panama, Champion (4, BMNH), [Panama] V. de Chiriqui, 25-4000 ft., Champion (1, BMNH); Mexico / Mexico coll. Janson (1, BMNH).
- Deromecus trivittatus* Champion, 1895: 405
Lectotype here designated: Yolotepec / Mexico, Sallé Coll. [♀]. Champion (1895) noted that he studied three specimens. I examined three syntypes. Paralectotypes are labeled as the lectotype.
- Dicrepidius politus* Champion, 1894: 294
Lectotype here designated: Chontales, Nicaragua, T. Belt [♂]. Champion (1894) noted 11 specimens were studied by him. Only six specimens were seen by me. Paralectotypes are labeled: same as lectotype (1, BMNH), same, [E.M.] Janson (3, BMNH); Nicaragua / Sallé coll. (1, BMNH). The disposition of the missing five syntypes is unknown.
- Diplostethus peninsularis* (Champion), 1896: 507 [*Ludius*]
Lectotype here designated: [Mexico] California / ♂ / *Ludius* (*Crigmus*) *texanus*, Lec., Cand. v. Cdze Champion (1896) did not indicate the number of specimens that he studied. I examined 11 syntypes at the BMNH. All paralectotypes are labeled identically to the lectotype. Champion noted that one

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specimen from "Dr. Horn" was seen, this undoubtedly being G.H. Horn, and that this and other specimens held by Horn were labeled from "Cape San Lucas, Lower California." This locality is presently known as Cabo San Lucas, Baja California Sur, Mexico. The Horn specimen was not in the series seen.

Diplostethus meridanus (Champion), 1896: 507 [*Ludius*]

Lectotype here designated: [Mexico] ♂ / 315 / ex Deyrolle Coll, Janson / *Ludius* sp. n., ap. Candeze, Yucatan ♂ / ♂ Type / *Aphanobius torridus* Dej., Yucatan. Champion (1896) studied two specimens. Two syntypes were seen by me. The paralectotype labeled as the lectotype.

Dipropus aeneipennis (Champion), 1895: 330 [*Ischiodontus*]

Lectotype here designated: [Mexico] Chilpancingo, Guerrero, 4600 ft, July, H.H. Smith [♂]. Champion (1895) studied two specimens. Two syntypes were seen. The paralectotype is labeled as the lectotype.

Dipropus atricornis (Champion), 1895: 322 [*Ischiodontus*]

Lectotype here designated: [Mexico] Tapachula, Chiapas, Höhe [♂]. Champion (1895) did not indicate the number of specimens at hand. I examined 34 syntypes and two additional specimens. Paralectotypes are labeled: Guatemala / Guatemala, Coll. Janson (2, BMNH), Guatemala, 5000 ft. (3, BMNH), Guatemala, 55.71 (1, BMNH), Guatemala, Coll. Janson (2, BMNH), Coll. Janson ex Candeze / *Ischiodontus picipennis* Cdz n.sp. Guatemala R. (1, BMNH), Coll. Janson / *Anopl. picipennis* Cdz n.sp., Guatem. (1, BMNH), *Isch. picipennis* Cand. n.sp. Guatem. / Coll. Janson, ex Candeze (1, BMNH), Las Mercedes, 3000 ft., Champion (1, BMNH), San Ysidro, Guatemala, Champion (2, BMNH), same, Zapote (1, BMNH), same, Capetillo (11, BMNH); Bugaba, Panama, Champion (1, BMNH), same, 800-1500 ft. (2, BMNH), V. de Chiriqui, 2-3000 ft., Champion (4, BMNH). Two specimens are labeled "Cordova, Mexico, Sallé coll." but this locality was not given by Champion; these specimens are not syntypes.

Dipropus brevis (Champion), 1895: 335 [*Ischiodontus*]

Lectotype here designated: [Panama] Bugaba, 800-1,500 ft., Champion [♂]. Champion (1895) did not indicate the number of specimens studied. I examined 14 syntypes. Paralectotypes are labeled: [Panama] V. de Chiriqui, 2-3000 ft., Champion (5, BMNH); [Guatemala] Teleman, Vera Paz, Champion (2, BMNH), same, Panzos (2, BMNH), same, San Juan (1, BMNH), same, Chacoj (1, BMNH); Teapa / Teapa, Mexico, Coll. Janson (1, BMNH), Tuxtla / Mexico, Sallé Coll. (1, BMNH).

Dipropus carinicornis (Champion), 1895: 318 [*Ischiodontus*]

Lectotype here designated: [Guatemala] Teleman, Vera Paz, Champion [♀]. Champion (1895) did not indicate the number of specimens studied. I examined 13 syntypes. Paralectotypes are labeled: [Guatemala] Panzos, Vera Paz, Champion (1, BMNH); [Panama] Bugaba, 800-1500 ft., Champion (3, BMNH), same without elevation (1, BMNH), same, Los Remedios (1, BMNH), V. de Chiriqui, 2-3000 ft., Champion (1, BMNH); Chontales, Nicaragua, T. Belt (2, BMNH), same, Janson (2, BMNH), Nicaragua / Chontales, Nicaragua, Janson (1, BMNH). A single specimen labeled "Venezuela / Coll. Janson" was seen at the BMNH but this specimen is not a syntype.

Dipropus chiriquensis (Champion), 1895: 323 [*Ischiodontus*]

Lectotype here designated: [Panama] V. de Chiriqui, 2-3000 ft., Champion [♂]. Champion (1895) did not indicate the number of specimens that he studied. I examined 17 syntypes. Paralectotypes are labeled: same as lectotype (6, BMNH; 1, USNM), same, 3-4000 ft. (2, BMNH; 1, USNM), same, 25-4000 ft. (2, BMNH; 1, USNM), below 4000 ft. (3, BMNH). Champion noted two specimens came from Bugaba, but only one was seen in the BMNH collection and none in the USNM, thus at least one syntype is missing.

Dipropus debilis (Champion), 1895: 336 [*Ischiodontus*]

Lectotype here designated: [Panama] V. de Chiriqui, 4000-6000 ft., Champion [♂]. Champion (1895) studied two specimens. I examined two syntypes. The paralectotype is labeled as the lectotype.

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Dipropus denticornis (Champion), 1895: 329 [*Ischiodontus*]

Lectotype here designated: Zapote, Guatemala, G.C. Champion [♂]. Champion (1895) studied three specimens. I examined three syntypes. Paralectotypes are labeled: same as lectotype (1, BMNH), [Guatemala] San Gerónimo, 3000 ft., Champion (1, BMNH).

Dipropus elongatus (Champion), 1895: 320 [*Ischiodontus*]

Lectotype here designated: [Mexico] Chilpancingo, Guerrero, 4600 ft., June, H.H. Smith [sex undetermined]. Champion (1895) studied seven specimens. I examined seven syntypes. Paralectotypes are labeled: [Mexico] Cuernavaca, Morelos, June, H.H.S. (3, BMNH), Juquila / Mexico, Sallé Coll. (3, BMNH). An additional specimen labeled "Mexico / Coll. Janson" was seen but this is not a syntype.

Dipropus griseipilis (Champion), 1895: 332 [*Ischiodontus*]

Lectotype here designated: [Panama] V. de Chiriqui, 4000-6000 ft, Champion [sex undetermined]. Champion (1895) studied three specimens. I examined three syntypes. Paralectotypes are labeled as the lectotype.

Dipropus limbatus (Champion), 1895: 336 [*Ischiodontus*]

Lectotype here designated: [Panama] V. de Chiriqui, below 4000 ft., Champion [sex undetermined]. Champion (1895) did not indicate the number of specimens that he studied. I examined 17 syntypes. Paralectotypes are labeled: same as lectotype (6, BMNH; 1, USNM), same, 25-4000 ft. (5, BMNH), same, 3-4000 ft (2, BMNH), same, 2-3000 ft (2, BMNH).

Dipropus marginatus (Champion), 1895: 330 [*Ischiodontus*]

Lectotype here designated: [Guatemala] Cerro Zunil, 5000 ft., Champion [♂] [specimen on left of two mounted on card]. Champion (1895) studied seven specimens. I examined seven syntypes. Paralectotypes are labeled: same as lectotype (1, BMNH), same, 4000 ft. (3, BMNH), same, 25-3000 ft. (2, BMNH). Champion (1895) gave the locality Volcan de Atitlan, but this name is not on labels of specimens examined. This location is distant from Cerro Zunil (Selander and Vaurie 1962).

Dipropus melas (Champion), 1895: 333 [*Ischiodontus*]

Lectotype here designated: Chontales, Nicaragua, T. Belt [♀]. Champion (1895) noted that 22 specimens were studied by him. I examined 14 syntypes. Paralectotypes are labeled: Nicaragua / Sallé Coll. (1, BMNH); Guatemala, Coll. Janson (1, BMNH); [Panama] V. de Chiriqui, 2-3000 ft., Champion (9, BMNH; 1, USNM), same, 25-4000 ft. (2, BMNH). Specimens from Bugaba noted by Champion (1895) were not seen, confirming that one or more syntypes are missing. A specimen labeled "Guatemala / coll. Janson" was seen in the BMNH but this locality was not indicated by Champion; this specimen is not a syntype. Guatemala is a previously unpublished country record for this species.

Dipropus prasinopterus (Champion), 1895: 329 [*Ischiodontus*]

Lectotype here designated: Juquila / Mexico, Sallé coll. [♂]. Champion (1895) studied two specimens. I examined two syntypes. The paralectotype is labeled as the lectotype.

Dipropus rufiventris (Champion), 1895: 333 [*Ischiodontus*]

Lectotype here designated: Jalapa, Mexico, Hoegge [♂]. Champion (1895) studied 12 specimens. Eleven syntypes were seen by me. Paralectotypes are labeled as the lectotype. The disposition of the twelfth specimen is unknown.

Dipropus subparallelus (Champion), 1895: 321 [*Ischiodontus*]

Lectotype here designated: [Costa Rica] Irazu, 6-7000 ft., H. Rogers [♂]. Champion (1895) noted three specimens from "Volcan de Irazu" were before him. I examined three syntypes. Paralectotypes are labeled as the lectotype.

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Dipropus yucatecus (Champion), 1895: 319 [*Ischiodontus*]

Lectotype here designated: [Mexico] Temax, N. Yucatan, Gaumer [♂]. Champion (1895) did not indicate the number of specimens studied. I examined 17 syntypes. Paralectotypes are labeled: same as lectotype (14, BMNH), Yucatan / 31 / *Ischiodontus tuspanus*, Coll. Mniszech / Coll. Janson ex Mniszech (1, BMNH). The disposition of a Honduran specimen cited by Champion from the Candèze collection, and being a syntype, is unknown. Two additional specimens associated with the syntypes were seen in the BMNH. The first is labeled "Playa Vicente, Mexico, Hoëge" and was noted by Champion, but equivocally identified with this species. I agree with Champion that this specimen differs from the original series and may represent a different species; it is not considered a syntype. Another associated specimen labeled "Aubé / Mexico" was apparently not studied by Champion and is not considered a syntype.

Esthesopus bifasciatus Champion, 1896: 445

Lectotype here designated: Bugaba, Panama, Champion [sex undetermined]. Champion (1896) studied two specimens. I examined two syntypes. The paralectotype is labeled as the lectotype.

Esthesopus brevisculus Champion, 1896: 444

Lectotype here designated: [Mexico] Acapulco, Guerrero, Höge [sex undetermined]. Champion (1896) studied two specimens. I examined two syntypes. The paralectotype is labeled as the lectotype.

Esthesopus coarctatus Champion, 1896: 445

Lectotype here designated: Mexico, Orizaba / Coll. Janson [sex undetermined]. Champion (1896) studied three specimens. I examined three syntypes. The paralectotypes are labeled as the lectotype.

Esthesopus fuscicornis Champion, 1896: 442

Lectotype here designated: [Mexico] Chilpancingo, Guerrero, Höge [sex undetermined]. Champion (1896) did not note the number of specimens studied. I examined 21 syntypes. Paralectotypes are labeled: same as lectotype (1, BMNH), same, 4600 ft., July, H.H. Smith (15, BMNH), Cuernavaca / Mexico, Sallé Coll. (2, BMNH), Yantepec, Morelos, Höge (1, BMNH), Cuernavaca, Morelos, June, H.H.S. (1, BMNH).

Esthesopus scapularis Champion, 1896: 445

Lectotype here designated: [Guatemala] Cerro Zunil, 4-5000 ft., Champion [♂]. Champion (1896) studied nine specimens. I examined nine syntypes. Paralectotypes are labeled: same as lectotype, 4000 ft (2, BMNH), Panajachel, 5000 ft., Champion (2, BMNH), El Zambador, 4500 ft., Champion (4, BMNH).

Glyphonyx angulatus Champion, 1896: 540

Lectotype here designated: [Guatemala] Sinanja, Vera Paz, Champion [sex undetermined]. Champion (1896) studied six specimens. I examined six syntypes. Paralectotypes are labeled: same as lectotype (4, BMNH); [Belize] R. Sarstoon, B. Honduras, Blancaneaux (1, BMNH).

Glyphonyx cinctus Champion, 1896: 546

Lectotype here designated: Belize, Blancaneaux [sex undetermined]. Champion (1896) studied six specimens. I examined six syntypes. Paralectotypes are labeled: same as lectotype (2, BMNH); [Mexico] Ex Deyrolle, Coll. Janson / *Glyphonyx cincticollis* Er., Teapa (1, BMNH), Soledad / Mexico, Sallé Coll. (2, BMNH).

Glyphonyx coarctatus (Champion), 1896: 550 [*Microglyphonyx*]

Lectotype here designated: [Panama] V. de Chiriqui, 8000 ft., Champion [sex undetermined]. Champion (1896) studied nine specimens. I examined nine syntypes. Paralectotypes are labeled as the lectotype.

Glyphonyx cuneatus Champion, 1896: 538

Lectotype here designated: [Mexico] Motzorongo, Vera Cruz, Flohr [sex undetermined]. Champion

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(1896) did not indicate the numbers of specimens studied. I examined 50 syntypes and one additional specimen. Paralectotypes are labeled: [Mexico] Atoyac, Vera Cruz, April, H.H.S. (2, BMNH), Tapachula, Chiapas, Höge (1, BMNH), Teapa, Tabasco, H.H.S. (16, BMNH), same, March (4, BMNH), same, Feb. (6, BMNH), same, Jan. (1, BMNH), same, Höge (1, BMNH); [Belize] Brit. Honduras (Dyson), Coll. Janson (4, BMNH), Rio Hondo, Brit. Honduras, Blancaneaux (6, BMNH); Zapote, Guatemala, Champion (7, BMNH); [Guatemala] Chacoj, Vera Paz, Champion (1, BMNH). The additional specimen in the BMNH is labeled "Guatemala City, Guatemala, Champion" but this record was not mentioned by Champion and is not considered a syntype.

Glyphonyx ebeninus Champion, 1896: 544

Lectotype here designated: [Guatemala] Chiacaman, Vera Paz, Champion [sex undetermined]. Champion (1896) studied 12 specimens. I examined 12 syntypes. The paralectotypes are labeled as the lectotype.

Glyphonyx flohri Champion, 1896: 544

Lectotype here designated: [Mexico] Motzorongo, Vera Cruz, Flohr [sex undetermined] [specimen on left of two on card]. Champion (1896) studied two specimens. I examined two syntypes, both mounted on one card.

Glyphonyx minimus Champion, 1896: 548

Lectotype here designated: [Panama] V. de Chiriqui, 4000-6000 ft., Champion [sex undetermined]. Champion (1896) did not indicate the number of specimens studied. I examined 14 syntypes. Paralectotypes are labeled: same as lectotype, 25-4000 ft. (4, BMNH), Bugaba, Panama, Champion (1, BMNH), same, 800-1500 ft. (8).

Glyphonyx parallelus Champion, 1896: 548

Lectotype here designated: [Mexico] Chilpancingo, Guerrero, 4000 ft., June, H.H. Smith [sex undetermined]. Champion (1896) did not indicate the number of specimens studied. I examined 23 syntypes. Paralectotypes are labeled: same as lectotype, 4600 ft (2, BMNH), same, July (17), same, 6000 ft., Aug. (1, BMNH), Chilpancingo, Guerrero, Höge (1, BMNH), Guanajuato / Mexico, Sallé Coll. (1, BMNH).

Glyphonyx propinquus Champion, 1896: 540

Lectotype here designated: [Mexico] Tepetlapa, Guerrero, 3000 ft., Oct., H.H. Smith [♀]. Champion (1896) studied seven specimens. I examined seven syntypes. Paralectotypes are labeled: [Mexico] Atoyac, Vera Cruz, April, H.H.S. (3, BMNH), same, May (2, BMNH); Dueñas, Guatemala, G.C. Champion (1, BMNH).

Glyphonyx rugipennis Champion, 1896: 539

Lectotype here designated: Zapote, Guatemala, Champion [sex undetermined]. Champion (1896) noted his study of five specimens. I examined five syntypes. The paralectotypes are labeled as the lectotype.

Glyphonyx teapensis Champion, 1896: 547

Lectotype here designated: [Mexico] 373 / Teapa / Ex. Deyrolle, Coll. Janson [sex undetermined]. Champion (1896) did not indicate the number of specimens studied. I examined 12 syntypes. Paralectotypes are labeled: same as lectotype (3, BMNH); [Mexico] Teapa, Tabasco, Jan., H.H.S. (3, BMNH), same, Feb. (2, BMNH), same, Jan. (2, BMNH), same, March (1, BMNH).

Glyphonyx tenuis Champion, 1896: 542

Lectotype here designated: [Mexico] Teapa, Tabasco, Jan., H.H.S. [sex undetermined]. Champion (1896) studied four specimens. I examined four syntypes. Paralectotypes are labeled: same as lectotype, March (2, BMNH), same, Feb. (1, BMNH).

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Glyphonyx vittatus Champion, 1896: 539

Lectotype here designated: [Mexico] Xucumanatlan, Guerrero, 7000 ft., July, H.H. Smith [sex undetermined]. Champion (1896) noted his study of six specimens. I examined eight syntypes. Paralectotypes are labeled: same as lectotype (2, BMNH); [Mexico] Ormiteme, Guerrero, 8000 ft., Aug., H.H. Smith (2, BMNH), Chilpancingo, Guerrero, 4000 ft., Oct., H.H. Smith (1, BMNH), same, July (1, BMNH), Amula, Guerrero, 6000 ft., Sept., H.H. Smith (1, BMNH).

Hemicrepidius acuminatus Champion, 1896: 482

Lectotype here designated: Oaxaca, Mexico, Hoega [♂]. Champion (1896) noted his study of five specimens. I examined five syntypes. Paralectotypes are labeled: same as lectotype (2, BMNH); Playa Vicente, Mexico, Hoega (2, BMNH).

Hemicrepidius amitinus Champion, 1896: 485

Lectotype here designated: [Mexico] Zacualtipan, Hidalgo, Höge [♂]. Champion (1896) noted his study of six specimens. I examined six syntypes. Paralectotypes are labeled: same as lectotype (3, BMNH); [Mexico] Real del Monte, Hidalgo, Höge (2, BMNH).

Hemicrepidius biformis Champion, 1896: 488

Lectotype here designated: Jalapa, Mexico, Hoega [♂]. Champion (1896) did not indicate the number of specimens that he studied. I examined 24 syntypes. Paralectotypes are labeled: [Guatemala] Chiacama, Vera Paz, Champion (19, BMNH); Sabo, Vera Paz, Champion (2, BMNH); Sinaja, Vera Paz, Champion (1, BMNH); Coban, Vera Paz, Champion (1, BMNH). An associated specimen in the BMNH and labeled "Cordova, Mexico" is not a syntype.

Hemicrepidius consanguineus Champion, 1896: 483

Lectotype here designated: [Costa Rica] Irazu, 6-7000 ft., H. Rogers [♂]. Champion (1896) studied three specimens. I examined three syntypes. Paralectotypes are labeled: same as lectotype (1, BMNH); [Panama] V. de Chiriqui, 4000-6000 ft., Champion (1, BMNH).

Hemicrepidius consobrinus Champion, 1896: 482

Lectotype here designated: Senah, Mexico, Champion [♀] [left specimen of two mounted on a card]. Champion (1896) studied three specimens. I examined three syntypes. Paralectotypes are labeled as the lectotype (2, BMNH).

Hemicrepidius cruciatus Champion, 1896: 487

Lectotype here designated: [Guatemala] Purula, Vera Paz, Champion [♂]. Champion (1896) did not indicate the number of specimens that he studied. I examined 15 syntypes. Paralectotypes labeled as the lectotype (14, BMNH).

Hemicrepidius germanus Champion, 1896: 483

Lectotype here designated: Capetillo, Guatemala, G.C. Champion [♀]. Two specimens were studied by Champion (1896). I examined two syntypes. The paralectotype is labeled: Chimaltenango, Guatemala, Conradt (1, BMNH).

Hemicrepidius longicornis Champion, 1896: 486

Lectotype here designated: [Costa Rica] Irazu, 6-7000 ft., H. Rogers [♂]. Champion (1896) noted that three specimens were studied. I examined two syntypes. The paralectotype is labeled: [Panama] V. de Chiriqui, 8000 ft., Champion. The disposition of the third syntype is unknown (1, BMNH).

Hemicrepidius parvulus Champion, 1896: 484

Lectotype here designated: [Guatemala] Purula, Vera Paz, Champion [♀]. Three specimens were studied by Champion (1896). I examined three syntypes. Paralectotypes are labeled as the lectotype (2, BMNH).

Lectotype designations for Elateridae (Coleoptera)

Hemicrepidius patruelis Champion, 1896: 484

Lectotype here designated: Oaxaca, Mexico; Hoegge [♀]. Three specimens were studied by Champion (1896). I examined three syntypes. Paralectotypes are labeled as the lectotypes (2, BMNH).

Heteroderes granulatus Champion, 1895: 358

Lectotype here designated: Presidio, Mexico, Forrer [♀]. Champion (1895) studied two specimens. I examined two syntypes. The paralectotype is labeled: Ventanas, Mexico, 2000 ft, Forrer (1, BMNH). Champion indicated that these specimens were male and female, but both are female.

Horistonotus apterus Champion, 1895: 438

Lectotype here designated: S. Geronimo, Guatemala, Champion [♂]. Champion (1895) studied four specimens. I examined four syntypes. Paralectotypes are labeled as the lectotype (1, BMNH).

Horistonotus bicinctus Champion, 1895: 436

Lectotype here designated: [Guatemala] San Juan, Vera Paz, Champion [left specimen of two on card][♂]. Champion (1895) studied 12 specimens. I examined 11 syntypes. Paralectotypes are labeled: same as lectotype (5, BMNH); [Panama] V. de Chiriqui, 25-4000 ft., Champion (2, BMNH), same, below 4000 ft. (1, BMNH), same, 2-3000 ft. (1, BMNH), same, 3-4000 ft. (1, BMNH). The disposition of one syntype is unknown.

Horistonotus discoideus Champion, 1895: 438

Lectotype here designated: Jalapa, Mexico, Hoegge [sex undetermined]. Champion (1895) studied three specimens. I examined three syntypes. Paralectotypes are labeled as the lectotype (2, BMNH).

Horistonotus duplicatus Champion, 1895: 434

Lectotype here designated: [Mexico] Tapachula, Chiapas, Höge [sex undetermined]. Champion (1895) studied two specimens. I examined two syntypes. The paralectotype is labeled as the lectotype (1, BMNH).

Horistonotus fasciatus Champion, 1895: 437

Lectotype here designated: [Mexico] Acapulco, Guerrero, Höge [♂]. Champion (1895) noted his study of 10 specimens. I examined eight syntypes. Paralectotypes are labeled as the lectotype (7, BMNH). The disposition of two syntypes is unknown.

Horistonotus flavipes Champion, 1895: 434

Lectotype here designated: Jalapa, Mexico, Hoegge [sex undetermined]. Champion (1895) studied 13 specimens. I examined 10 syntypes. Paralectotypes are labeled: Orizaba, Mexico, Coll. Janson (1, BMNH); Cerro de Plumas, Mexico, Hoegge (1, BMNH); [Mexico] Temax, N. Yucatan, Gaumer (1, BMNH); Dueñas, Guatemala, G.C. Champion (3, BMNH); S. Geronimo, Guatemala, Champion (2, BMNH); [Guatemala] Chinantla, 4104 (1, BMNH). A specimen associated with the syntypes labeled "C" Rica / Fry Coll 1905-100" is not a syntype.

Horistonotus haemorrhoidalis Champion, 1895: 431

Lectotype here designated: [Guatemala] Sinanja, Vera Paz, Champion [sex undetermined]. Champion (1895) studied eight specimens. I examined seven syntypes. Paralectotypes are labeled: same as lectotype (4, BMNH), same, San Juan (1, BMNH), same, Sinahu (1, BMNH). The disposition of one syntype is unknown.

Horistonotus mixtus Champion, 1895: 435

Lectotype here designated: Yolos / Mexico, Sallé Coll. [♂]. Champion (1895) studied two specimens. I examined two syntypes. The paralectotype is labeled: Veracruz / Mexico, Sallé Coll (1, BMNH).

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Horistonotus obliteratus Champion, 1895: 432

Lectotype here designated: Chontales, Nicaragua, Janson [sex undetermined]. Champion (1895) studied seven specimens. I examined seven syntypes. Paralectotypes are labeled: Mexico, Teapa / Coll. Janson ex Candeze (1, BMNH); 238 / Coll. Janson / Yucatan (Pilate) (1, BMNH), same, Ex Deyrolle (1, BMNH); [Mexico] Huetamo, Michoacan, Høge (1, BMNH), same, Temax, N. Yucatan, Gaumer (1, BMNH); [Guatemala] S. Geronimo, 3000 ft., Champion (1, BMNH).

Horistonotus sulcifer Champion, 1895: 433

Lectotype here designated: Champerico, Guatemala, Champion [specimen on left of two] [sex undetermined]. Champion (1895) studied five specimens. I examined two syntypes glued to one card. The disposition of three syntypes labeled from "Mexico, Tapachula, Chiapas", is unknown.

Horistonotus truncatus Champion, 1895: 433

Lectotype here designated: Caldera, Panama, Champion [sex undetermined]. Champion (1895) studied two specimens. I examined two syntypes. The paralectotype is labeled: Bugaba, 800-1500 ft., Champion (1, BMNH).

Hypodesis aureipilis Champion, 1896: 492

Lectotype here designated: [Panama] Bugaba, 800-1500 ft., Champion [♀]. Champion (1896) noted six species for study. I examined six syntypes. Paralectotypes are labeled: same as lectotype (4, BMNH); Chiriqui (1, BMNH).

Hypodesis auricoma Champion, 1896: 493

Lectotype here designated: [Panama] V. de Chiriqui, 2-3000 ft., Champion [♀]. Champion (1896) noted that he studied 24 specimens. I examined 14 syntypes. Paralectotypes are labeled: same as the lectotype (6, BMNH); same, 25-4000 ft. (7, BMNH); same, 3-4000 ft. (1, BMNH). Champion stated that he had four specimens from Bugaba, Panama, and Colombia, and four specimens from Chontales, Nicaragua. None of these latter eight syntypes were seen in the BMNH.

Hypodesis viridipennis Champion, 1896: 494

Lectotype here designated: [Guatemala] Purula, Vera Paz, Champion [♂]. Champion (1896) studied six specimens. I examined 4 syntypes. Paralectotypes are labeled: same as lectotype (1, BMNH); [Guatemala] Senahu, Vera Paz, Champion (1, BMNH); [Belize] British Honduras (Dyson) / Coll. Janson (1, BMNH). An additional specimen is labeled "Sinanja, Vera Paz, Champion" but this locality was not given by Champion (1896) and is not a syntype.

Limonius longulus Champion, 1896: 455

Lectotype here designated: Juquila / Mexico, Sallé Coll. / [♂]. Champion (1896) had four specimens for study. I examined four syntypes. Paralectotypes are labeled as the lectotype.

Megapenthes cincticollis Champion, 1895: 379

Lectotype here designated: Jalapa, Mexico, Hoegge [♀]. Champion (1895) studied two female specimens. I examined two syntypes. The paralectotype is labeled as the lectotype.

Megapenthes cinnamomeus Champion, 1895: 379

Lectotype here designated: [Guatemala] Sinanja, Vera Paz, Champion [♂]. Champion (1895) studied two male specimens. I examined two syntypes. The paralectotype is labeled: Capetillo, Guatemala, G.C. Champion.

Megapenthes furvus Champion, 1895: 377

Lectotype here designated: Cordova / Mexico, Sallé Coll. / 1684 [♀]. Champion (1895) noted his study of three specimens. I examined three syntypes. Paralectotypes are labeled: Nicaragua / Chontales, Nicaragua, Janson (2, BMNH).

Lectotype designations for Elateridae (Coleoptera)

Megapenthes fusiformis Champion, 1895: 384

Lectotype here designated: [Panama] V. de Chiriqui, 2-3000 ft., Champion [♂]. Champion (1895) did not indicate the number of specimens studied. I examined 16 syntypes. Paralectotypes are labeled: same as lectotype (6, BMNH), same, below 4000 ft. (3, BMNH), same, 25-4000 ft. (6, BMNH).

Megapenthes longitarsis Champion, 1895: 382

Lectotype here designated: Capetillo, Guatemala, G.C. Champion [♂]. Champion (1895) did not indicate the number of specimens that he studied. I examined 14 syntypes. Paralectotypes are labeled: same as lectotype (11, BMNH); [Costa Rica] Irazu, 6-7000 ft., H. Rogers (1, BMNH); [Panama] V. de Chiriqui, 4000-6000 ft., Champion (1, BMNH).

Megapenthes mexicanus Champion, 1895: 380

Lectotype here designated: Jalapa, Mexico, Hoege [♀]. Champion (1895) noted his study of two females. I examined two syntypes. The paralectotype is labeled: 295 / Coll. Janson / *Steatoderus rufus* Pilate, Yucatan.

Megapenthes rubiginus Champion, 1895: 378

Lectotype here designated: Chontales, Nicaragua, T. Belt [♀]. Champion (1895) noted eight specimens were before him. I examined seven syntypes. Paralectotypes are labeled: [Panama] V. de Chiriqui, 25-4000 ft., Champion (3, BMNH), same, 2-3000 ft. (2, BMNH), same, below 4000 ft. (1, BMNH). The disposition of the eighth specimen is unknown.

Megapenthes sobrinus Champion, 1895: 381

Lectotype here designated: [Panama] Bugaba, 800-1500 ft., Champion [♂]. Champion (1895) studied three specimens. I examined three syntypes. Paralectotypes are labeled as the lectotype (1, BMNH).

Melanotus cribrosus (Champion), 1896: 450 [*Spheniscosomus*]

Lectotype here designated: Jalapa, Mexico, F.D.G. [♂]. Champion (1896) studied four specimens. Four syntypes were seen by me. Paralectotypes are labeled: same as lectotype (2, BMNH); Chontales, Nicaragua, T. Belt (1, BMNH).

Melanotus guatemalensis (Champion), 1895: 446 [*Dodecactenus*]

Lectotype here designated: Guatemala; Sallé coll. [♂]. Champion (1895) did not indicate the number of specimens that he studied. I examined 12 syntypes. Paralectotypes are labeled: [Guatemala] Purula, Vera Paz, Champion (9, BMNH), same, Coban (1, BMNH), same, Tactic-La Tinta (1, BMNH).

Melanotus laevis (Champion), 1896: 451 [*Spheniscosomus*]

Lectotype here designated: Jalapa, Mexico, Hoege [♀]. Champion (1896) studied eight specimens. I examined eight syntypes. Paralectotypes are labeled: [Guatemala] Coban, Vera Paz, Champion (1, BMNH); British Honduras (Dyson), Coll. Janson (1, BMNH); [Panama] V. de Chiriqui, 2-3000 ft., Champion (1, BMNH); Chontales, Nicaragua, T. Belt (3, BMNH), same, Janson / Coll. Janson (1, BMNH).

Melanotus tropicalis (Champion), 1896: 449 [*Spheniscosomus*]

Lectotype here designated: [Guatemala] El Tumbador, 2500 ft., Champion [♂]. Champion (1896) did not indicate the number of specimens that he studied. I examined 18 syntypes. Paralectotypes are labeled: [Guatemala] Las Mercedes, 300 ft., Champion (1, BMNH); Cerro Zunil, 4-5000 ft., Champion (2, BMNH); Cerro Zunil, 4000 ft., Champion (1, BMNH); Capetillo, Guatemala, Champion (1, BMNH); [Panama] Bugaba, 800-1500 ft., Champion (3, BMNH); V. de Chiriqui, 25-4000 ft., Champion (1, BMNH); V. de Chiriqui, 3-4000 ft., Champion (1, BMNH).

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Mulsantus isthmicus (Champion), 1896: 502 [*Ludius*]

Lectotype here designated: [Panama] Bugaba, 800-1500 ft., Champion [♂]. Champion (1896) noted five specimens before him. Five syntypes were seen by me. Paralectotypes are labeled: same as lectotype (3, BMNH); Bugaba, Panama, Champion (1, BMNH).

Mulsantus nigricollis (Champion), 1896: 501 [*Ludius*]

Lectotype here designated: [Panama] V. de Chiriqui, 25-4000 ft., Champion [♂]. Champion (1896) did not indicate the number of specimens that he studied. I examined 14 syntypes. Paralectotypes are labeled: same as lectotype (5, BMNH); same, 2-3000 ft (8, BMNH).

Mulsantus subopacus (Champion), 1896: 503 [*Ludius*]

Lectotype here designated: [Guatemala] Sabo, Vera Paz, Champion [♂]. Champion (1896) studied 10 specimens. I examined 10 syntypes. Paralectotypes are labeled: same as lectotype (2, BMNH); [Guatemala] Sinonja, Vera Paz, Champion (6, BMNH); [Panama] V. de Chiriqui, 2-3000 ft., Champion (1, BMNH).

Mulsantus tropicalis (Champion), 1896: 504 [*Ludius*]

Lectotype here designated: [Guatemala] Senabu, Vera Paz, Champion [sex undetermined]. Champion (1896) studied two specimens. Two syntypes were seen by me. The paralectotype is labeled: [Panama] V. de Chiriqui, 2-3000 ft., Champion.

Neorhaphes americanus (Champion), 1895: 413 [*Arrhaphes*]

Lectotype here designated: Zapote, Guatemala, Champion [sex undetermined]. Champion (1895) studied 11 specimens. I examined 10 syntypes. Paralectotypes are labeled: [Guatemala] Las Mercedes, 3000 ft., Champion (2, BMNH), same, Cerro Zunil, 4-5000 ft. (1, BMNH), same, 4000 ft. (2, BMNH); [Panama] Bugaba, 800-1500 ft. (2, BMNH), Tolé, Panama, Champion (1, BMNH); Teapa, Mexico, Coll. Janson (1, BMNH). The disposition of one syntype is unknown.

Orthostethus cavifrons Champion, 1896: 510

Lectotype here designated: [Panama] V. de Chiriqui, 2-3000 ft., Champion [♂]. Champion (1896) noted his examination of seven specimens. Four syntypes were seen by me. Paralectotypes are labeled as the lectotype (3, BMNH).

Paradonus quadriplagiatus (Champion), 1895: 411 [*Hypnoidus*] **New Combination**

Lectotype here designated: Rio Naranjo, 450 ft, Champion [sex undetermined]. Champion (1895) studied eight specimens. I examined six syntypes. Paralectotypes are labeled as the lectotype. Two syntypes are missing on an overdue loan from the BMNH and may be lost.

Paradonus quadrisignatus (Champion), 1895: 412 [*Hypnoidus*] **New Combination**

Lectotype here designated: Tolé, Panama, Champion [sex undetermined] [specimen on left of two mounted on card]. Champion (1895) did not indicate the number of specimens examined by him. I examined 14 syntypes. Paralectotypes are labeled as the lectotype (12, BMNH; 2, USNM).

Paradonus teapensis (Champion), 1895: 410 [*Hypnoidus*] **New Combination**

Lectotype here designated: ex Deyrolle, coll Janson; Horistonotus sp., Teapa (Pilate) [sex undetermined]. Champion (1895) studied three specimens. I examined two syntypes. A paralectotype is labeled: [Mexico] Teapa, Tabasco, Jan., H.H.S. The third syntype is on an overdue loan from the BMNH and may be lost.

Paradonus tetraspilotus (Champion), 1895: 411 [*Hypnoidus*]

Lectotype here designated: Paraiso, 300 ft, Champion [sex undetermined] [specimen on left of two mounted on a card]. Champion (1895) studied 14 specimens. I examined 10 syntypes. Paralectotypes

Lectotype designations for Elateridae (Coleoptera)

are labeled as the lectotype. Two specimens are missing from an overdue loan from the BMNH and may be lost. The disposition of two additional syntypes is unknown.

Platycrepidius eburatus (Champion), 1895: 339 [*Eudactylus*]

Lectotype here designated: Bugaba, Panama, Champion [♂]. Champion (1895) studied four specimens. Four syntypes were seen by me. Paralectotypes are labeled as the lectotype. An additional specimen arranged with the syntypes and labeled "Panama, Gatun, 1-3.ii.1925, G. Bateson, B.M. 1927-34" is not a syntype.

Pomachilius mucronatus Champion, 1895: 406

Lectotype here designated: [Panama] V. de Chiriqui, below 4000 ft., Champion [sex undetermined]. Champion (1895) studied nine specimens. I examined eight syntypes. Paralectotypes are labeled: same as the lectotype, 3-4000 ft. (7, BMNH). Champion noted the elevation of his specimens as "2500 ft.", which is not on the labels. This elevation difference is considered a typographic error.

Pomachilius spinifer Champion, 1895: 406

Lectotype here designated: [Panama] V. de Chiriqui, 4000-6000 ft., Champion [sex undetermined]. Champion (1895) studied 11 specimens. I examined 11 syntypes. Paralectotypes are labeled: same as lectotype (8, BMNH); Boquete, 3500 ft., Champion (2, BMNH). The latter location was not specifically given by Champion in the original species description. However, Champion (1907) and Selander and Vaurie (1962) give the location of Boquete as being on the "southeastern slope of Volcan de Chiriqui" and at an elevation of "3550 feet." This information is satisfactory for retaining the syntypical status of the Boquete specimens.

Scaptolenus nigriceps Champion, 1896: 566

Lectotype here designated: Rio Sucio, Costa Rica, H. Rogers [♂]. Champion (1896) studied two specimens. Two syntypes were examined by me. The paralectotype is labeled as the lectotype (1, BMNH).

Spilus ciliaticornis Champion, 1894: 295

Lectotype here designated: Chontales, Nicaragua, T. Belt [♂]. Champion (1894) studied nine specimens. I examined nine syntypes. Paralectotypes are labeled: [Panama] Bugaba, 800-1500 ft., Champion (5), V. de Chiriqui, 25-4000 ft., Champion (2, BMNH), same, 2-3000 ft. (1, BMNH). Two apparently conspecific specimens associated with the syntypes are labeled "Chiguinda, Ecuador, Buckley"; these are not syntypes.

Tomicephalus bicolor Champion, 1896: 498 [*Tomocephalus*]

Lectotype here designated: [Panama] V. de Chiriqui, 25-4000 ft., Champion [♂]. Champion (1896) studied 14 specimens. I examined 13 syntypes. Paralectotypes are labeled: same as lectotype (3, BMNH); same, 3-4000 ft. (1, BMNH); same, 2-3000 ft. (2, BMNH); [Panama] Bugaba, 800-1500 ft., Champion (1, BMNH); Chontales, Nicaragua (2, BMNH); Nicaragua, T. Belt / Chontales, Nicaragua, Janson (2, BMNH); and Nicaragua / Sallé Coll. (1, BMNH). The disposition of one syntype is unknown. An additional non-syntypical specimen is labeled: "Chontales / Sharp Coll., 1905-313".

Tomicephalus insignis Champion, 1896: 499 [*Tomocephalus*]

Lectotype here designated: Chontales, Nicaragua, T. Belt [♀]. Champion (1896) studied seven specimens. I examined seven syntypes. Paralectotypes are labeled: same as lectotype (1, BMNH); Nicaragua / Chontales, Nicaragua, Janson (4, BMNH); Nicaragua / Sallé Coll. (1, BMNH). An additional non-syntypical specimen is labeled: "Chontales / Sharp Coll., 1903-313".

Tomicephalus melanotus Champion, 1896: 497 [*Tomocephalus*]

Lectotype here designated: Zapote, Guatemala, G.C. Champion [♀]. Champion (1896) did not indicate

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the number of specimens that he examined. I examined 12 syntypes. Paralectotypes are labeled: same as lectotype (3, BMNH), [Guatemala] San Ysidro, 1600 ft., Champion (1, BMNH), same, Cerro Zunil, 4-5000 ft. (6); Cordova, Mexico, Sallé Cõil. (1, BMNH).

Triplonychoides parvulus (Champion), 1895: 427 [*Tryplonychus*]

Lectotype here designated: [Guatemala] Las Mercedes, 3000 ft., Champion [♂] [left specimen of two on card]. Champion (1895) studied eight specimens. I examined eight syntypes. Paralectotypes are labeled: same as lectotype (1, BMNH); [Guatemala] El Zumbador, 2500 ft., Champion (4, BMNH), [Guatemala] Cerro Zunil, 5000 ft., Champion (2, BMNH).

Triplonychoides trivittatus (Champion), 1895: 427 [*Tryplonychus*]

Lectotype here designated: Tolé, Panama, Champion [♂] [left specimen of two on card]. Champion (1895) did not note the number of specimens studied. I examined 18 syntypes. Paralectotypes are labeled: same as lectotype (3, BMNH); Chontales, Nicaragua, T. Belt (2, BMNH); [Panama] Bugaba, 800-1500 ft., Champion (10); San Feliz, Panama, Champion (2, BMNH).

Zorochros canescens (Champion), 1895: 409 [*Hypnoidus*]

Lectotype here designated: [Guatemala] Panajachel, 5000 ft., Champion [sex undetermined] [specimen on left of two mounted on card]. Champion (1895) did not indicate the number of specimens that he studied. I examined 16 syntypes. Paralectotypes are labeled: same as lectotype (3, BMNH), Guatemala City, Champion (1, BMNH), S. Geronimo, Guatemala, Champion (11, BMNH). Champion recorded specimens from Pantaleon, Guatemala, but these are missing and may be part of an overdue loan and lost.

ACKNOWLEDGMENTS

My gratitude is extended to Christine Von Hayek, Martin Brendell, Max Barclay, and the Coleoptera staff of The Natural History Museum, and Nancy Adams, Dave Furth, Scott Miller, Natalia Vandenberg, and Coleoptera staff of the U.S. Museum of Natural History, for their generous assistance and hosting during my visits. Richard Westcott, Oregon Department of Agriculture, José Luis Navarrete-Heredia, Universidad de Guadalajara, and the anonymous reviewers, are thanked for their editorial assistance to penultimate drafts. This report emanated from studies supported by the Costa Rican National Biodiversity Institute [Instituto Nacional de Biodiversidad (INBio)], Santo Domingo, through the Coleoptera of Costa Rica Inventory. Funding of this study and inventory work was provided by the World Bank's Global Environmental Facility (GEF) through the project "Desarrollo de Recursos de la Biodiversidad" (Biodiversity Resources Development Project), grant No. CR-GE-39876. The Costa Rican Ministry of Environment and Energy (MINA)E) generously provided permits and access to sites, personnel, and resources.

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Recibido: 11 de marzo del 2002
Aceptado: 15 de mayo del 2002

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Classification of the Genera of Elateridae of Mexico and Central America

SUBFAMILY AGRYPNINAE

Tribe Agrypnini
Agrypnus Eschscholtz
Dilobitarsus Latreille
Lacon Laporte
Meristhus Candèze
Stangellus Golbach
Rismethus Fleutiaux
Tribe Oophorini
Aeolus Eschscholtz
Conoderus Eschscholtz
Deronocus Johnson
Heteroderes Latreille
Tribe Platycrepidini
Platycrepidius Candèze
Tribe Hemirhipini
Alaus Eschscholtz
Chalcolepidius Eschscholtz
Chalcolepis Candèze
Hemirhipus Berthold
Lacais Fleutiaux
Pherhimius Fleutiaux
Saltamartinius Casari
Tribe Pyrophorini
Deilelater Costa
Ignelater Costa
Lygelater Costa
Pyrophorus Billberg
Vesperelater Costa
Tribe Cleidecostini
Cleidecosta Johnson
Tribe Anaissini
Anaissus Candèze
Peralampes Johnson

SUBFAMILY DENDROMETRINAE

Tribe Dendrometrini
Acanthathous Champion
Athous Eschscholtz
Hemicrepidius Germar
Limonius Eschscholtz
Tribe Prosternini
Anthracoptyx Horn
Tribe Oxynopterini
Melanactes LeConte
Oistus Candèze

Tribe Senodoniini

Allotriopsis Champion

SUBFAMILY NEGASTRIINAE

Agrypnella Champion
Neorhaphes Costa
Negastrius Thomson
Paradonus Stibick
Zoroehros Thomson

SUBFAMILY SEMIOTINAE

Semiotus Eschscholtz

SUBFAMILY LISSOMINAE

Tribe Lissomini
Drapetes Dejean
Lissomus Dalman
Tribe Hypodesini
Hypodesis Latreille

SUBFAMILY CEBRIONINAE

Tribe Cebrioini
Scaptolenus LeConte
Tribe Aplastini
Cylindroderus Latreille
Octinodes Candèze

SUBFAMILY ELATERINAE

Tribe Elaterini
Diplostethus Schwarz
Mulsanteus Gozis
Orthostethus Lacordaire
Tomicephalus Latreille
Tribe Agriotini
Subtribe Agriotina
Agriotes Eschscholtz
Cardiorhinus Eschscholtz
Dalopius Eschscholtz
Subtribe Synaptina
Glyphonyx Candèze
Tribe Pomachiliini
Deromecus Solier
Paranius Champion
Pomachilius Eschscholtz
Psiloniscus Candèze
Smiliceroides Schwarz
Smilicerus Candèze
Tribe Megapenthini
Megapenthes Kiesenwetter
Tribe Ampedini
Subtribe Ampedina
Ampedus Dejean
Subtribe Dicrepidina
Achrestus Candèze
Anoplischiopsis Champion
Anoplischius Candèze
Atractosomus Lacordaire
Crepidius Candèze
Cyathodera Blanchard
Dicrepidius Eschscholtz
Dipropus Germar
Heterocrepidius Guérin-Mèneville
Spilomorphus Champion
Spilus Candèze
Subtribe Melanotina
Melanotus Eschscholtz
Subtribe Physorhinina
Anchastomorphus Champion
Anchastus LeConte
Physorhinus Germar

Lectotype designations for Elateridae (Coleoptera)

SUBFAMILY CARDIOPHORINAE

Aphricus LeConte
Aptopus Eschscholtz
Cardiophorus Eschscholtz
Esthesopus Eschscholtz
Horistonotus Candèze

Triplonychus Candèze

Triplonychoides Schwarz

SUBFAMILY THYLACOSTERNINAE

Balgus Fleutiaux

Pterotarsus Guérin-Méneville

Thylacosternus Bonvouloir



Plate 1 - Figures. 1-12, Elateridae exemplars. Fig. 1, *Acanthathous pachyceroides* Champion; Fig. 2, *Acanthathous photinoides* (Champion); Fig. 3, *Achrestus venustus* Champion; Fig. 4, *Aeolus livens* (LeConte); Fig. 5, *Aeolus pictus* Candèze; Fig. 6, *Agriotes cruciatus* Champion; Fig. 7, *Agriotes virgatus* Candèze; Fig. 8, *Agrypnella squamifera* Candèze; Fig. 9, *Agrypnus brevis* Candèze; Fig. 10, *Agrypnus paleatus* (Champion); Fig. 11, *Alaus plebejus* Candèze; Fig. 12, *Allotriopsis nasalis* Champion.

Lectotype designations for Elateridae (Coleoptera)

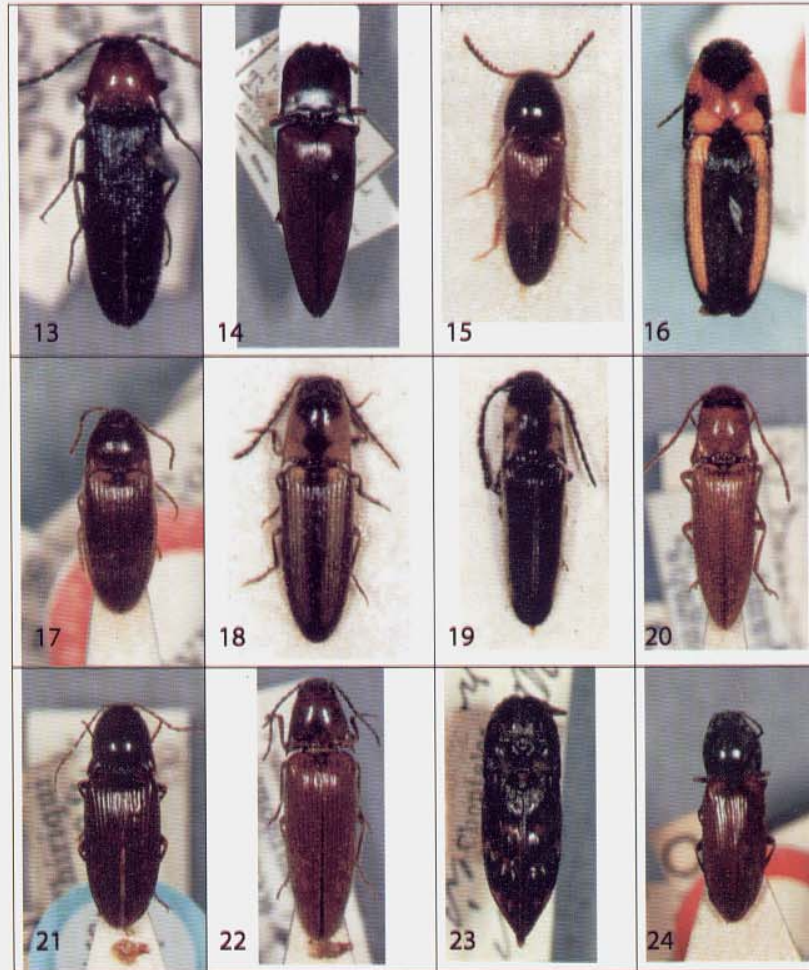


Plate 2 - Figures. 13-24, Elateridae exemplars. Fig. 13, *Ampedus arctus* (Candèze); Fig. 14, *Anaïssus tarsalis* Candèze; Fig. 15, *Anchastomorphus apicalis* Steinheil; Fig. 16, *Anchastus flavovittatus* Champion; Fig. 17, *Anchastus tenuistriatus* Champion; Fig. 18, *Anoplischopsis flavovittata* Champion; Fig. 19, *Anoplischius elegans* Champion; Fig. 20, *Anoplischius pallidus* Champion; Fig. 21, *Aptopus chiriquensis* Champion; Fig. 22, *Atractosomus mucronatus* Champion; Fig. 23, *Balgus humilis* Bonvouloir; Fig. 24, *Cardiophorus mexicanus* Champion.

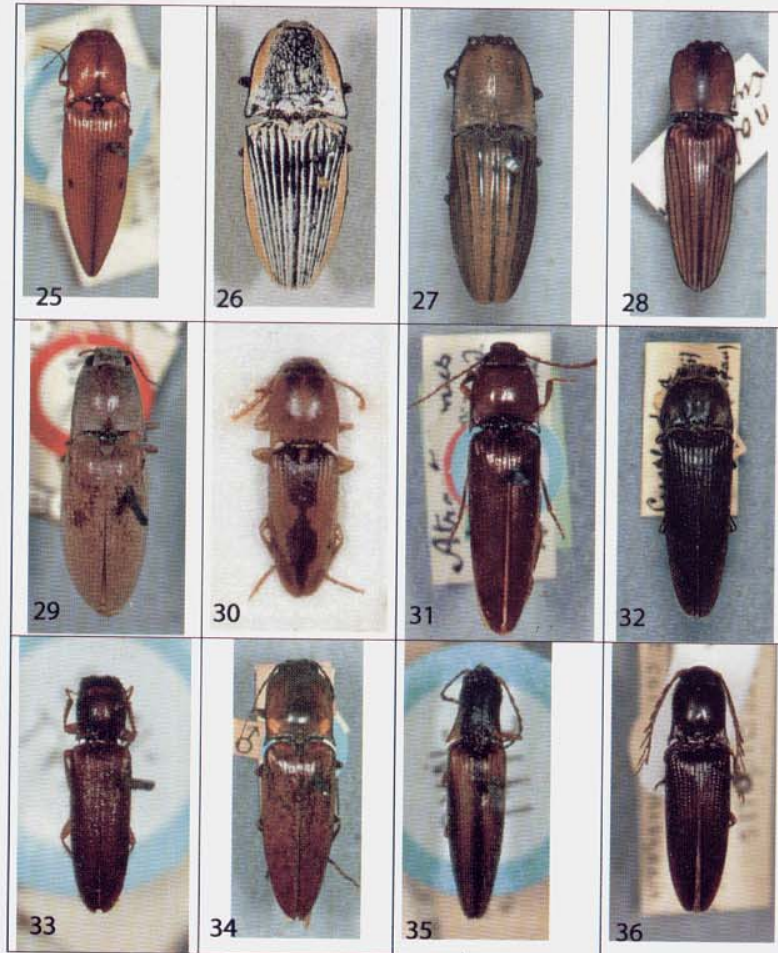


Plate 3 – Figures. 25-36, Elateridae exemplars. Fig. 25, *Cardiorhinus binotatus* Champion; Fig. 26, *Chalcolepidius rugatus* Candèze; Fig. 27, *Chalcolepidius silbermanni* Chevrolat; Fig. 28, *Chalcolepis luczoti* Candèze; Fig. 29, *Conoderus albinus* (Candèze); Fig. 30, *Conoderus exclamationis* (Candèze); Fig. 31, *Crepidius emarginatus* Candèze; Fig. 32, *Cyathodera lanugicollis* Candèze; Fig. 33, *Cylindroderus mexicanus* Candèze; Fig. 34, *Deilelater radians* (Champion); Fig. 35, *Deromecus trivittatus* Champion; Fig. 36, *Dicrepidius corvinus* Candèze.

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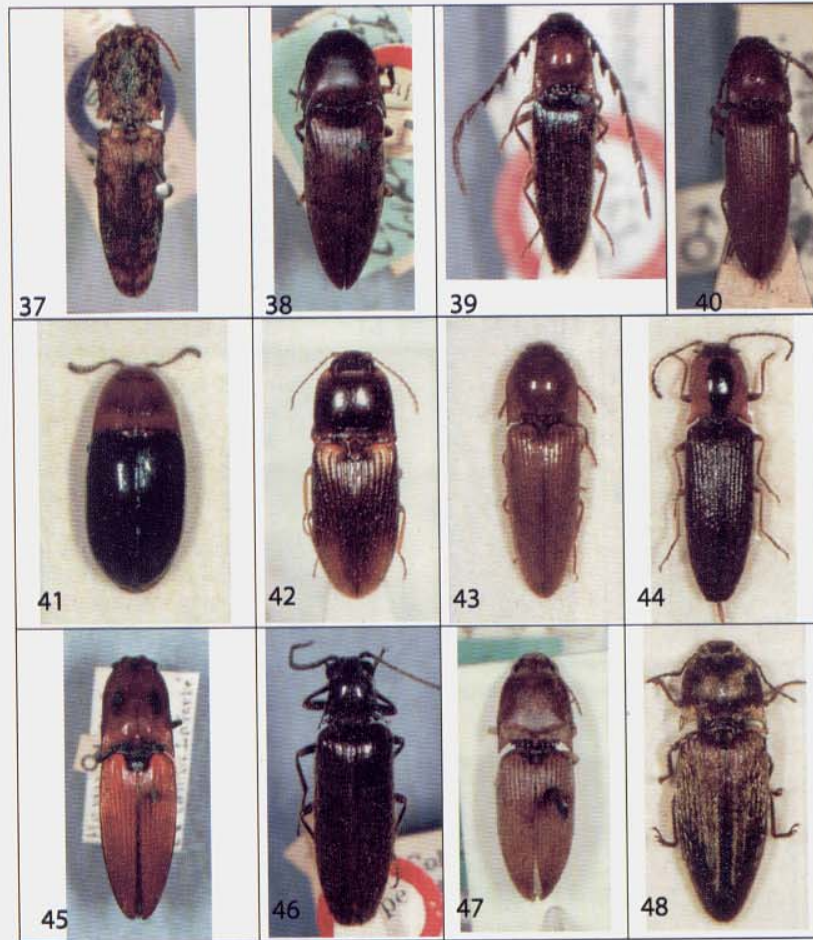


Plate 4 – Figures. 37-48, Elateridae exemplars. Fig. 37, *Dilobitarsus inopinus* Candèze; Fig. 38, *Diplostethus peninsularis*(Champion); Fig. 39, *Dipropus denticornis*(Champion); Fig. 40, *Dipropus rufulus*(Candèze); Fig. 41, *Drapetes ruficollis* Bonvouloir; Fig. 42, *Esthesopus quadripustulatus* Candèze; Fig. 43, *Glyphonyx laticollis* Champion; Fig. 44, *Hemicrepidius parvulus* Champion; Fig. 45, *Hemirhipus bimaculatus* Candèze; Fig. 46, *Heterocrepidius megalops* Champion; Fig. 47, *Heteroderes amplicollis*(Gyllenhal); Fig. 48, *Hypodesis aureipilis* Champion.

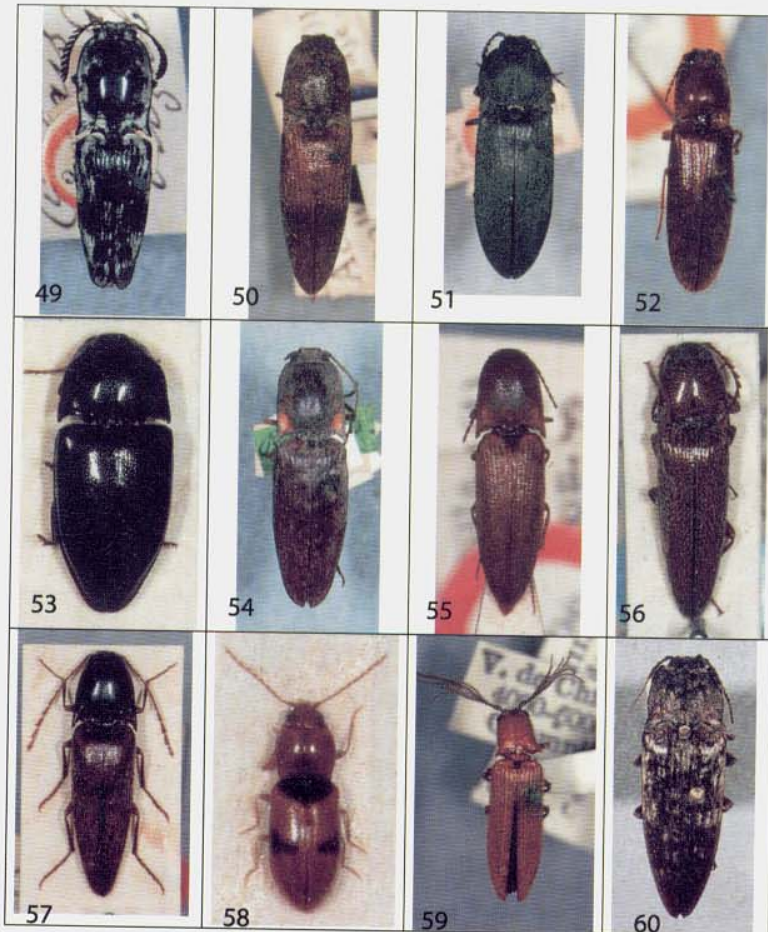


Plate 5 – Figures. 49-60. Elateridae exemplars. Fig. 49, *Lacais nietoi* (Sallé); Fig. 50, *Lacon pollinaria* (Candèze); Fig. 51, *Lacon viridis* (Champion); Fig. 52, *Limonius quadraticollis* Candèze; Fig. 53, *Lissomus ustulatus* Bonvouloir; Fig. 54, *Lygelater fulgidus* (Germar); Fig. 55, *Megapenthes bicostata* Champion; Fig. 56, *Melanotus tropicalis* (Champion); Fig. 57, *Mulsanteus nigricollis* (Champion); Fig. 58, *Neoarhaphes americanus* (Champion); Fig. 59, *Octinodes carinatus* Champion; Fig. 60, *Oistus cacicus* Candèze.

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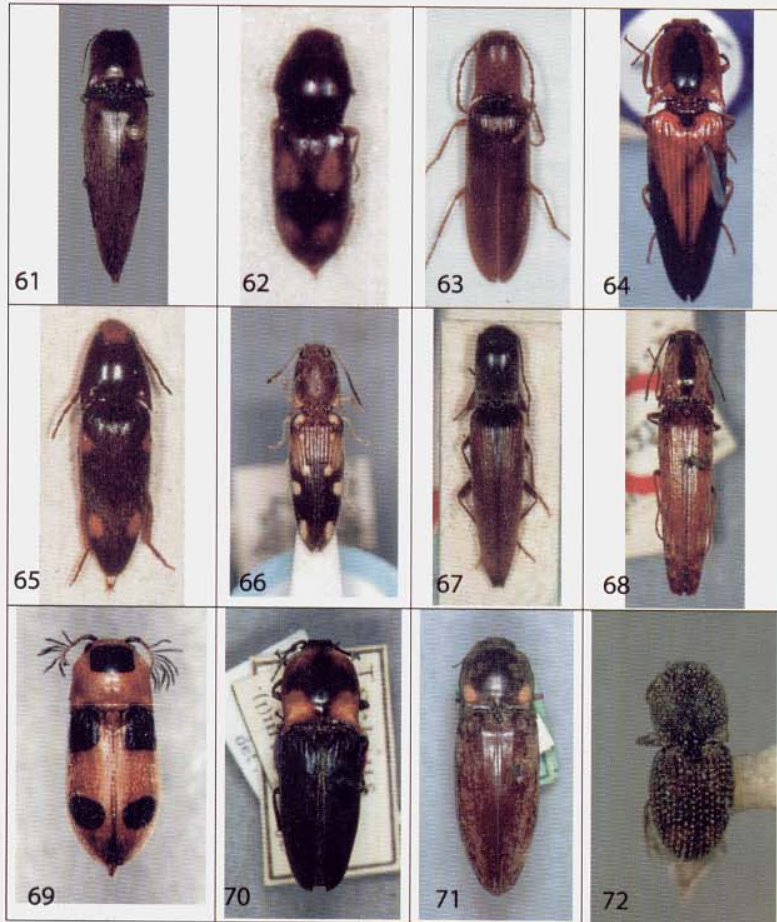


Plate 6 – Figures. 61-72. Elateridae exemplars. Fig. 61, *Orthostethus infuscatus* Germar; Fig. 62, *Paradonus quadrisignatus* (Champion); Fig. 63, *Paranius mexicanus* Champion; Fig. 64, *Peralampes restinctus* (Champion); Fig. 65, *Physorhinus quadrinotatus* Champion; Fig. 66, *Platycrepidius eburatus* Champion; Fig. 67, *Pomachilius spinifer* Champion; Fig. 68, *Psiloniscus costaricensis* Champion; Fig. 69, *Pterotarsus histrio* (Guérin-Ménéville); Fig. 70, *Pyrischius haagi* (Champion); Fig. 71, *Pyrophorus strabus* Germar; Fig. 72, *Rismethus squamiger* (Champion).

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Plate 7 – Figures, 73-84, Elateridae exemplars. Fig. 73, *Scaptolenus guerini* Chevrolat; Fig. 74, *Semiotus carus* Janson; Fig. 75, *Semiotus cuspidatus* Chevrolat; Fig. 76, *Smilicerus belti* Sharp; Fig. 77, *Spilomorpha rubricollis* Champion; Fig. 78, *Spilus ciliaticornis* Champion; Fig. 79, *Thylacosternus donatus* Horn; Fig. 80, *Tomicephalus insignis* Champion; Fig. 81, *Triplonychus trivittatus* (Champion); Fig. 82, *Vesperelater occidentalis* (Champion); Fig. 83, *Ypsilosthetus semiotulus* Candèze; Fig. 84, *Zorochros cucullatus* (Horn).