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Leaf Beetles of the Cayman Islands (Coleoptera: Chrysomelidae)

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**Abstract.** Data are presented for 29 chrysomelid species (Coleoptera: Chrysomelidae) occurring in the Cayman Islands, West Indies, 26 of these not having been reported from these islands previously. *Altica occidentalis* Suffrian is removed from the genus *Lysathia* Bechyné and reinstated in *Altica* Geoffroy. *Chaetocnema perplexa* Blake is synonymized with *Chaetocnema confinis* Crotch, **new synonymy**. *Omophoita cyanipennis octomaculata* (Crotch) is synonymized with *Omophoita cyanipennis* (Fabricius), **new synonymy**. The following nine species are named and described: *Apraea luciae*, *Apraea priscilae*, *Cryptocephalus catharinae*, *Cryptocephalus kirki*, *Cryptocephalus paulotigrinus*, *Longitarsus alisonae*, *Megistops adiae*, *Nyctiplanctus bifasciatus*, *Syphrea thurstonae*, all are **new species**. Taxonomic notes and a key to species, as well as information on plant associations and extralimital distribution, are also provided.

**Key words.** Chrysomelidae, leaf beetles, Cayman Islands, West Indies, taxonomy

## Introduction

The leaf beetles (Coleoptera: Chrysomelidae) of the Cayman Islands are very poorly known. Indeed, in his list of West Indian Chrysomelidae, Takizawa (2003) did not report the occurrence of even a single species from the Cayman Islands. In spite of this, a few chrysomelids have been recorded from there. Askew (1980) stated that three chrysomelid species occur on Little Cayman, although he did not indicate which species were involved. In other reports, only three chrysomelids have been recorded from the Cayman Islands, and the species names stated (see species treatments below).

## Materials and Methods

We recently examined a small number of specimens from the Cayman Islands. All are deposited in the Brigham Young University Collection, Provo, Utah (**BYUC**), the Florida State Collection of Arthropods, Gainesville, Florida (**FSCA**), the private collection of Robert H. Turnbow, Jr., Enterprise, Alabama (**RHTC**), or the United States National Museum of Natural History, Washington, D.C. (**USNM**). Edward G. Riley kindly supplied information on an additional specimen contained in his personal collection in College Station, Texas (**EGRC**).

We report on these specimens in the paragraphs below. Label data from holotypes are transcribed verbatim. Data from other specimens are reported nearly as they appear on labels, but with some standardization in the format of dates, punctuation, sequence of information, etc. With a few exceptions, the diagnoses and descriptions, including measurements, are based on the Cayman Islands material we have

**Table 1.** Recorded distribution of Cayman Islands species of Chrysomelidae. Each “X” indicates the occurrence of a species on one of the islands of the Cayman Islands, or elsewhere in the West Indies, or on mainland North America. In the case of *Chalepus sanguinicollis*, the question marks indicate that the species is recorded from the Cayman Islands, but without specification of which of the islands. The widespread species *C. sanguinicollis*, *Deloyala guttata*, *Chaetocnema confinis*, *Epitrix fasciata*, and *Diachus auratus* occur not only on mainland North America, but also on mainland South America. Apparently due to recent range expansion, *C. confinis*, *E. fasciata*, and *D. auratus* also occur in various Old World localities.

Species	Grand Cayman	Little Cayman	Cayman Brac	Other West Indies	Mainland North America
<i>Lema trabeata</i>	X				X
<i>Chalepus sanguinicollis</i>	?	?	?	X	X
<i>Physonota jamaicensis</i>	X			X	
<i>Charidotella jamaicensis</i>	X			X	
<i>Deloyala guttata</i>	X			X	X
<i>Erynephala maritima</i>	X			X	X
<i>Nyctiplanctus bifasciatus</i>			X		
<i>Altica occidentalis</i>	X			X	
<i>Apraea luciae</i>		X	X		
<i>Apraea priscilae</i>	X				
<i>Chaetocnema brunnescens</i>	X	X	X	X	X
<i>Chaetocnema confinis</i>	X			X	X
<i>Disonycha spilotrachelata</i>		X		X	
<i>Epitrix fasciata</i>	X			X	X
<i>Longitarsus alisonae</i>	X	X			
<i>Longitarsus providensis</i>	X	X		X	
<i>Megistops adiae</i>	X		X		
<i>Omophoita albicollis</i>	X			X	
<i>Omophoita cyanipennis</i>	X			X	X
<i>Syphrea thurstonae</i>	X		X		
<i>Metachroma adustum</i>	X	X	X	X	X
<i>Metachroma clarkei</i>		X	X		X
<i>Cryptocephalus catharinae</i>	X				
<i>Cryptocephalus irroratus</i>	X				X
<i>Cryptocephalus kirki</i>		X	X		
<i>Cryptocephalus paulotigrinus</i>	X				
<i>Diachus auratus</i>	X			X	X
<i>Pachybrachis</i> species 1	X	X	X		
<i>Pachybrachis</i> species 2	X				

examined. Additional material to be examined from the Cayman Islands, and especially material from extralimital areas, may not all exactly match these descriptions, but specimens are expected to be very similar. The synonymy section for each species is limited to citations of the original proposal of names. These sections are not intended to be comprehensive catalogs. Photographs were obtained with an Olympus SZX12 dissecting microscope equipped with an MTI 3CCD camera, or with an Olympus BX61 compound microscope equipped with an Olympus CC12 camera. In either case, Olympus MicroSuite montage hardware and software were employed, and images were thereafter cleaned up with Adobe Photoshop.



Our treatment does not include the subfamily Bruchinae, even though we do believe that this group is phylogenetically nested within the Chrysomelidae. We have chosen to leave the study of this subfamily to specialists who are more equipped to perform the investigation. With respect to the other subfamilies, we do not suppose that our treatment of the chrysomelids of the Cayman Islands is complete. Surely, there are addition species yet to be detected, beyond those that we now know to occur on the islands. We do believe that our treatment will greatly facilitate future studies.

### Key to Cayman Islands Chrysomelidae

1. Terminal abdominal tergite forming easily visible pygidium, not covered by elytra; hind femora much broader than those of front and middle legs; eyes of most species deeply emarginate; pronotum and elytra of most species densely pubescent ..... **Bruchinae (this subfamily not included in this study)**
- If pygidium exposed and hind femora much enlarged, then elytra glabrous and eye not deeply emarginate ..... **2**
  
- 2(1). Lateral bead of prothorax absent; prothorax broadest at base and apex, strongly constricted near mid-length; each leg with tarsal claws connate (contiguous in basal half); elytra bicolored, black and yellow (Fig. 1, 2); length 5.5-6.5 mm ..... ***Lema trabeata* Lacordaire**
- Lateral bead of prothorax well developed; prothorax not distinctly constricted near mid-length; tarsal claws divergent from base to apex ..... **3**
  
- 3(2). Head opisthognathous, with front or vertex projecting strongly forward; tarsal formula 4-4-4; abdominal ventrites 1 and 2 connate, although suture between them indicated by groove ... **4**
- Head usually normal, prognathous or hypognathous, with front or vertex not projecting strongly forward; tarsal formula 5-5-5, pseudotetramerous, with penultimate tarsomere minute and usually hidden between lobes of tarsomere 3; abdominal ventrites 1 and 2 usually free ..... **7**
  
- 4(3). Body narrow, more than twice as long as broad (Fig. 3); margins of pronotum and elytra not explanate; antennae porrect, not retractable; elytra strongly carinate and rather coarsely punctate; head, ventral surfaces, antennae, legs, and at least distal area of elytra black; prothorax and at least basal area of elytra red or orange; length 5.8-7.3 mm ..... ***Chalepus sanguinicollis* (Linnaeus)**
- Body in dorsal view round or oval, less than twice as long as broad (Fig. 4, 5); margins of pronotum and elytra explanate; antennae capable of retraction; elytra not strongly carinate or coarsely punctate; coloration not as above ..... **5**
  
- 5(4). Clypeus (area between antennae and labrum) forming transverse ridge; all tarsal claws simple, clearly without basal appendages; elytral punctures denser (Fig. 4); length 9.5-10.5 mm ..... ***Physonota jamaicensis* (Linnaeus)**
- Clypeus longer, flat, somewhat semicircular; either some tarsal claws (at least those of front legs) appendiculate, or tarsal claws simple but appearing appendiculate due to projecting flanks of terminal tarsomere; elytral punctures sparser (Fig. 5); size smaller, 4.0-5.5 long ..... **6**
  
- 6(5). Base of elytra behind pronotum finely crenulate; prothorax next to head with short groove bordered laterally by short carina; tarsal claws simple, although appearing appendiculate due to projecting flanks of terminal tarsomere; color extremely variable, but usually with anterolateral corners of elytra dark (Fig. 5); length 5.5 mm ..... ***Deloyala guttata* (Olivier)**
- Base of elytra smooth; prothorax without groove next to head; tarsal claws (at least those of front legs) appendiculate; anterolateral corners of elytra pale; length 4.0-4.8 mm ..... ***Charidotella jamaicensis* (Blake)**
  
- 7(3). Abdomen with ventrites 2 to 4 usually strongly shortened mesally; body subcylindrical, compact (Fig. 25-32); head deeply inserted into prothorax, vertically flattened; pygidium exposed; antennal

- insertions separated from each other by distance much greater than length of basal antennomere ..... 8
- Abdomen with intermediate ventrites not abnormally shortened; body not subcylindrical; head less deeply inserted into prothorax; exposed pygidium absent, except in some species with antennae separated by distance not greater than length of basal antennomere ..... 14
- 8(7). Base of pronotum crenulate, without elevated margin (this character sometimes hidden by base of elytra); front femora similar in size to those of middle legs ..... 9
- Base of pronotum margined by easily visible elevated ridge; front femora much thicker than those of middle legs ..... 13
- 9(8). Tarsal claws appendiculate; eyes separated from each other by distance greater than maximum diameter of each eye; dorsal color usually dark, with pronotal disc somewhat paler than elytra, with lateral pronotal margins much paler (Fig. 30); length 1.5-1.8 mm ..... *Diachus auratus* (Fabricius)
- Tarsal claws simple; eyes separated from each other by distance less than maximum diameter of eye; color variable, but in some species different than described above; size larger ..... 10
- 10(9). Punctures in basal half of elytra very large, only vaguely arranged in rows (Fig. 26); length 4.1-5.9 mm ..... *Cryptocephalus irroratus* Suffrian
- Elytral punctures smaller, clearly arranged in regular rows, except sometimes in areas posterior to humerus and at apex ..... 11
- 11(10). Punctures of head very fine and inconspicuous; punctures of pronotum only slightly coarser than those of head, much smaller than those of elytral epipleuron; each posterolateral quadrant of pronotum with oblique impression; color variable (Fig. 28, 29); length 4.7-5.0 mm ..... *Cryptocephalus paulotigrinus*, new species
- Punctures of head conspicuous; punctures of pronotum, deep, coarse, dense, similar in size to those of elytral epipleuron; pronotum without large depressed area in posterolateral quadrant; size smaller ..... 12
- 12(11). Color, including that of legs, almost uniformly dark brown (Fig. 27); length 2.5-3.9 mm ..... *Cryptocephalus kirki*, new species
- Color paler brown, with that of pronotal margins, elytral margins, and legs lighter than other areas, yellowish brown (Fig. 25); length 2.3-3.5 mm ..... *Cryptocephalus catharinae*, new species
- 13(8). Eyes of female separated from each other by distance about equal to the length of basal antennomere, those of male by distance much less than length of basal antennomere; punctures in basal half of elytra arranged in irregular rows (Fig. 31); dorsal surface between punctures nearly smooth, somewhat shining; length 3.0-4.2 mm ..... *Pachybrachis* sp. 1
- Eyes in both male and female separated by distance many times greater than length of basal antennomere; punctures in basal half of elytra completely confused, except laterally (Fig. 32); dorsal surface between punctures distinctly alutaceous; length 2.0-2.3 mm ..... *Pachybrachis* sp. 2
- 14(7). Antennal insertions separated from each other by distance much greater than length of basal antennomere; eyes near antennal insertions deeply emarginate; hind femora not greatly enlarged in comparison to those of middle legs; dorsal edge of middle and hind tibiae with densely setose preapical emargination ..... 15
- Antennal insertions separated by distance less than length of basal antennomere; eyes not deeply emarginate, at most gently concave near antennal insertions; hind femora variable, either slender or greatly enlarged in comparison to those of middle legs; setose preapical emargination

- of middle and hind tibiae absent from all species with slender hind femora, either present or absent in species with greatly enlarged hind femora ..... 16
- 15(14). Prothorax dark brown (Fig. 22); elytra varying from entirely light brown (unusual specimens) to entirely dark brown, frequently mostly dark with apical area light, never with reticulate pattern, never mostly light with isolated dark spots; length 4.0-5.2 mm ..... ***Metachroma adustum* Suffrian**
- Pronotum light brown with four dark spots, in some specimens these coalescing to form only two spots; elytra never entirely dark or with only apical area pale, usually light brown with suture dark and with dark discal spots (Fig. 23), in some specimens these spots coalescing to form somewhat reticulate pattern (Fig. 24), in unusual specimens these spots absent or very weakly indicated; length 3.1-4.7 mm ..... ***Metachroma clarkei* Blake**
- 16(14). Hind femora slightly to greatly enlarged in comparison to those of front and middle legs; in species with only slightly enlarged hind femora, pronotum with distinct transverse sulcus anterior to basal bead ..... 17
- Hind femora not abnormally enlarged; pronotum without prebasal transverse sulcus ..... 29
- 17(16). Elytra densely setose, pale yellowish brown, usually with darker median macula (Fig. 15); length 1.0-1.5 mm ..... ***Epitrix fasciata* Blatchley**
- Elytra without setae; coloration otherwise ..... 18
- 18(17). Pronotum with distinct prebasal transverse sulcus anterior to basal bead ..... 19
- Pronotum without prebasal transverse sulcus ..... 20
- 19(18). Color entirely dark metallic blue (Fig. 9); hind femur only moderately enlarged, less than twice as broad as middle femur; length 3.9-4.8 mm ..... ***Altica occidentalis* Suffrian**
- Elytra dark metallic blue or green; head, prothorax, and legs pale yellowish brown (Fig. 21); hind femur greatly enlarged, more than twice as broad as middle femur; length 1.8 mm ..... ***Syphrea thurstonae*, new species**
- 20(18). Terminal tarsomere of hind leg greatly enlarged distally ..... 21
- Terminal tarsomere of hind leg similar to that of middle leg, not greatly enlarged distally .... 22
- 21(20). Oblique postmedian spot of elytron very narrow, more than twice as long as broad (Fig. 19); elytra never immaculate or with reduced spotting; length 5.6-6.4 mm ..... ***Omophoita albicollis* (Fabricius)**
- When present, oblique postmedian spot of elytron oval, usually less than twice as long as broad (Fig. 20); elytra of some specimens with reduced number of spots or entirely dark; length 6.1-7.0 mm ..... ***Omophoita cyanipennis* (Fabricius)**
- 22(20). Eyes separated from each other by distance less than greatest diameter of eye ..... 23
- Eyes separated from each other by distance greater than greatest diameter of eye ..... 25
- 23(22). Hind tibia with terminal spur broad, apically truncate; elytral punctures minute, inconspicuous (Fig. 18); length 3.0-3.2 mm ..... ***Megistops adiae*, new species**
- Hind tibia with terminal spur slender, not truncate at apex; elytral punctures larger, easily visible (Fig. 10, 11) ..... 24
- 24(23). Pronotal and elytral punctures fine, those of elytra arranged in regular rows; distance separating elytral striae much more than diameter of elytral puncture; dorsal color pale yellowish brown, with dark elytral markings on humerus and in elongate streak behind middle (Fig. 11); length 3.4-3.7 mm ..... ***Apraea priscilae*, new species**

- Pronotal and elytral punctures coarse, those of elytra arranged in irregular double rows, these separated from each other by distance not much greater than diameter of puncture; dorsal color uniformly dark brown (Fig. 10); length 4.3-5.2 mm ..... ***Apraea luciae*, new species**
- 25(22). Elytral punctures arranged in regular rows, easily visible; dorsal edge of middle and hind tibiae with densely setose preapical emargination ..... **26**
- Elytral punctures confused, in some species minute and hardly visible; middle and hind tibiae without setose preapical emargination ..... **27**
- 26(25). Vertex densely, uniformly punctate; prothorax nearly as wide as elytral base (Fig. 12); length 1.6-1.8 mm ..... ***Chaetocnema brunnescens* Horn**
- Larger punctures of vertex limited to cluster near each eye; prothorax much narrower than elytral base (Fig. 13); length 1.5 mm ..... ***Chaetocnema confinis* Crotch**
- 27(25). Hind leg with basal tarsomere much less than half as long as tibia; dorsal color yellow with dark spots on pronotum and dark stripes on elytra (Fig. 14); length 5.0-5.5 mm .....  
..... ***Disonycha spilotrachel* Blake**
- Hind leg with basal tarsomere about half as long as tibia; coloration otherwise; size smaller ....  
..... **28**
- 28(27). Elytra slightly shortened and truncate, leaving most of terminal abdominal tergite exposed (Fig. 16); pronotal punctures as large as those of elytra; spaces between pronotal punctures polished; length 1.6-1.7 mm ..... ***Longitarsus alisonae*, new species**
- Terminal abdominal tergite completely covered by elytra (Fig. 17); pronotal punctures distinctly smaller than those of elytra; spaces between pronotal punctures strongly alutaceous; length 1.5-1.6 mm ..... ***Longitarsus providensis* Blake**
- 29(16). Pronotum and elytra distinctly punctate and pubescent; elytra brown, those of some specimens with darker longitudinal stripes; length 7.0 mm (Fig. 6, 7) .....  
..... ***Erynephala maritima* (LeConte)**
- Pronotum and elytra glabrous, minutely, inconspicuously punctate; elytra black, with apex and submedian transverse fascia orange (Fig. 8); length 6.8-7.0 mm .....  
..... ***Nyctiplanctus bifasciatus*, new species**

### Subfamily Bruchinae

The taxonomic placement of this group of beetles, often called bean weevils or seed beetles, is controversial and sometimes hotly debated. Historically, the group has been treated at the family rank of Bruchidae. Some workers still hold to this view, emphasizing morphological differences, as well as the fact that the behavior is very distinct, the larvae developing within seeds, rather than on foliage or roots as is prevalent among most of the Chrysomelidae. In contrast, many modern systematists believe that the phylogenetic position of the bean weevils is within the Chrysomelidae, the seed feeding association having developed after several of the basal chrysomelid lineages had already diverged. It is believed that much of the distinct morphology is specialization associated with this habit. These systematists treat the bean weevils as the subfamily Bruchinae, within the family Chrysomelidae. In this publication, we follow this second view, with the group treated at subfamily rank. Even so, we do not deal with these species, deferring to bruchine specialists to do so.

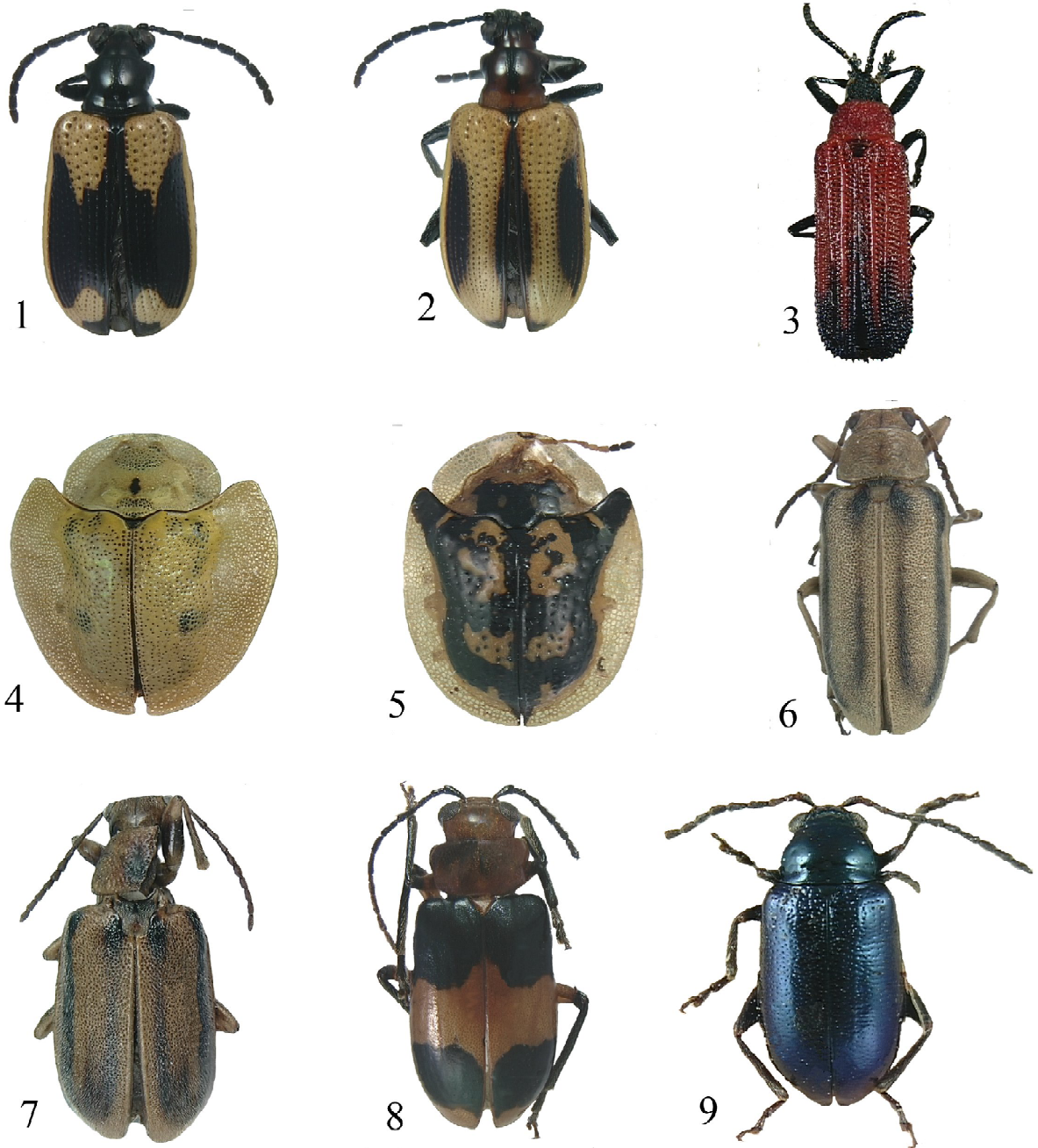
### Subfamily Criocerinae, Tribe Lemini

#### ***Lema trabeata* Lacordaire**

(Figures 1-2)

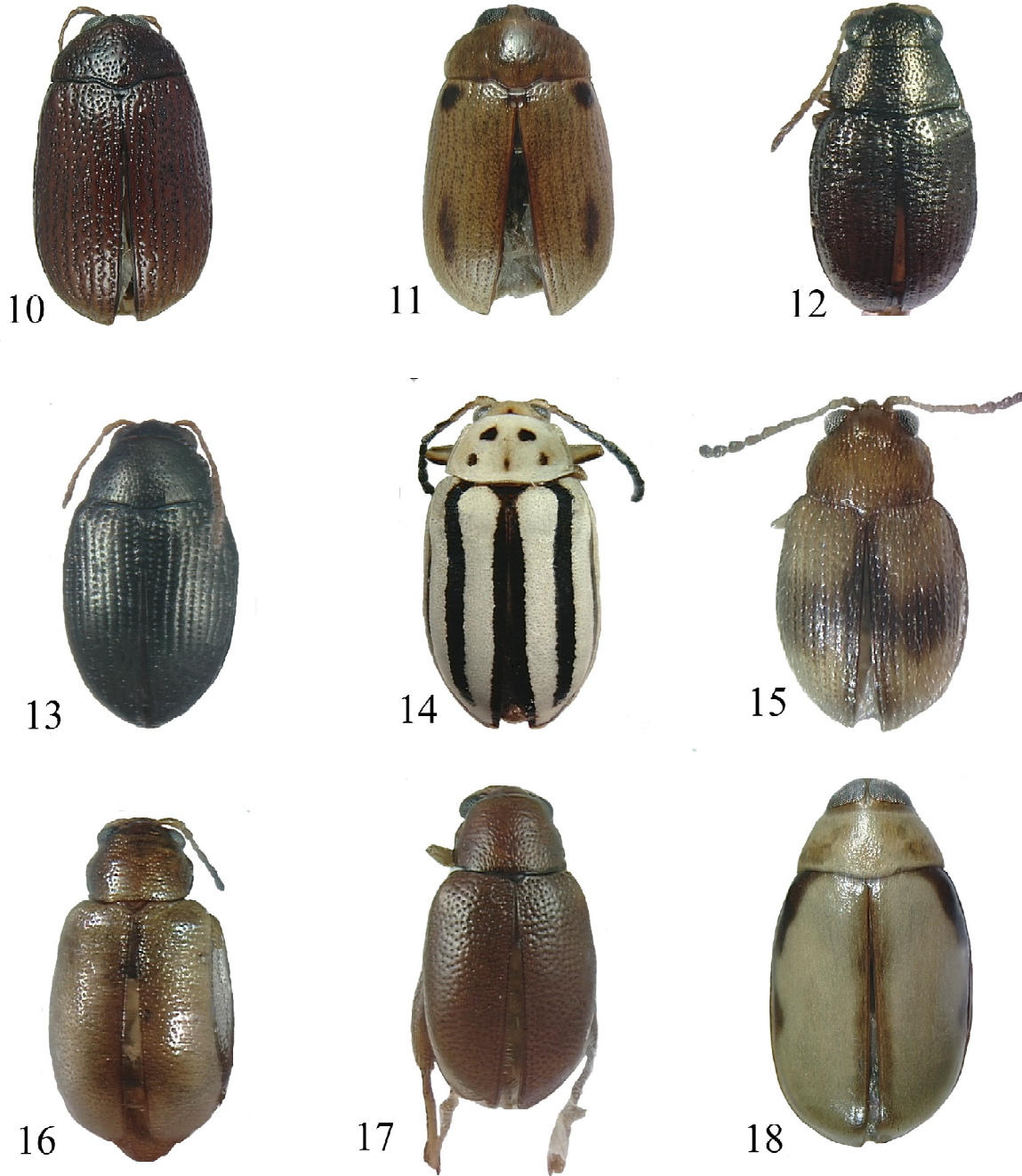
*Lema trabeata* Dejean 1835: 359 [*nomen nudum*].

*Lema confusa*, var. *trabeata* Lacordaire 1845: 409.



**Figures 1-9.** Dorsal habitus. **1)** *Lema trabeata* Lacordaire, dark form. **2)** *Lema trabeata* Lacordaire, light form. **3)** *Chalepus sanguinicollis* (Linnaeus), specimen from Cuba. **4)** *Physonota (Eurypepla) jamaicensis* (Linnaeus). **5)** *Deloyala guttata* (Olivier). **6)** *Erynephala maritima* (LeConte), normal specimen from Texas. **7)** *Erynephala maritima*, specimen from Grand Cayman, with malformed prothorax. **8)** *Nyctiplanctus bifasciatus*, new species. **9)** *Altica occidentalis* Suffrian.

**Diagnosis.** The connate tarsal claws (claws that are broadly contiguous in the basal half), as well as the general appearance (Fig. 1-2), immediately distinguish this species from all other chrysomelids known to occur in the Cayman Islands. *Neolema dorsalis* (Olivier), a common and widespread species that may eventually be found in the Cayman Islands, also has connate claws, but the appearance is quite different. In that species, the elytra are orange with a large, black, bell-shaped marking in the basal half and with another large black marking in the posterior half.



**Figures 10-18.** Dorsal habitus. **10)** *Apraea luciae*, new species. **11)** *Apraea priscilae*, new species. **12)** *Chaetocnema brunnescens* Horn. **13)** *Chaetocnema confinis* Crotch. **14)** *Disonycha spilotrachelata* Blake. **15)** *Epitrix fasciata* Blatchley. **16)** *Longitarsus alisonae*, new species. **17)** *Longitarsus providensis* Blake. **18)** *Megistops adiae*, new species.

**Material examined.** Cayman Islands, Grand Cayman, Arboretum, 10-VI-2010, K. Palmer, KP65B, *Datura metel* (1, BYUC; 4, FSCA).

**Extralimital distribution.** On the mainland, this species occurs from the southern United States to Central America (Riley et al. 2003). Additionally, the similar species *Lema confusa* Chevrolat (with *L. trabeata* being listed as a synonym) has been reported from Cuba, Jamaica, and Puerto Rico (Takizawa 2003). Some of these West Indian records may have been based on *L. trabeata*.

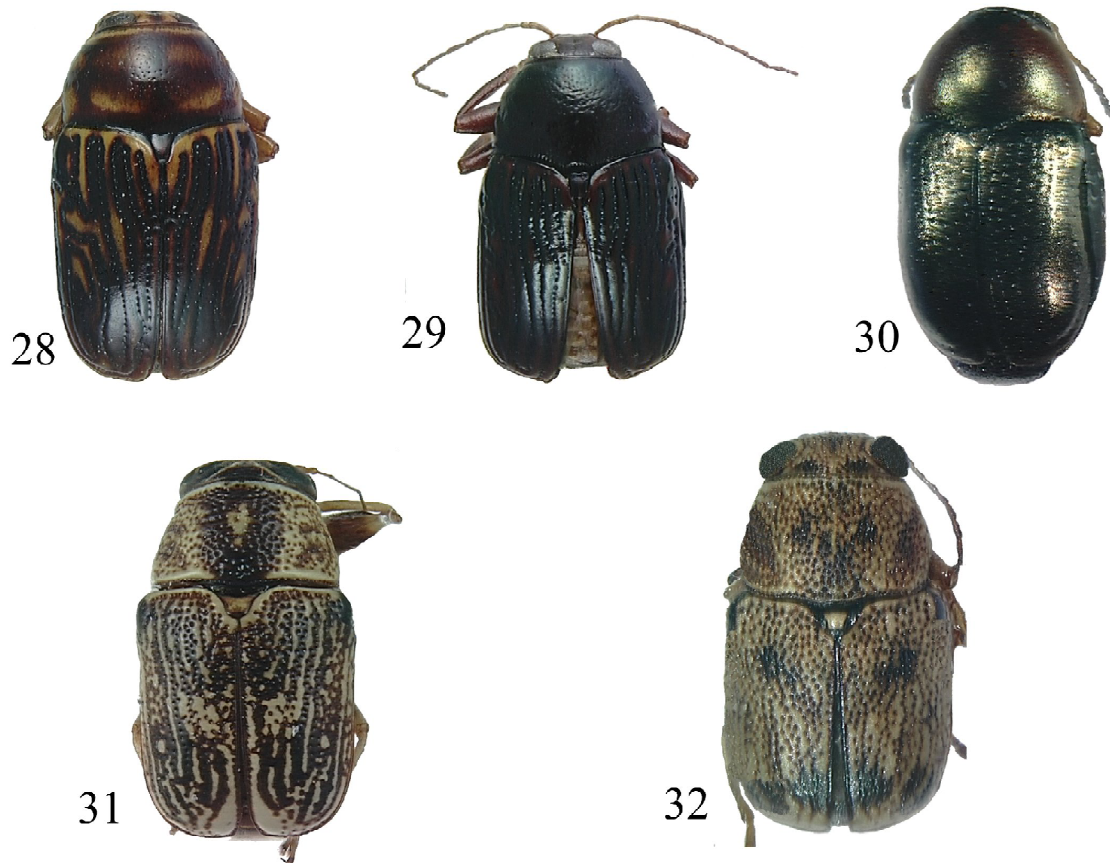




**Figures 19-27.** Dorsal habitus. **19)** *Omophoita albicollis* (Fabricius). **20)** *Omophoita cyanipennis* (Fabricius). **21)** *Syphrea thurstonae*, new species. **22)** *Metachroma adustum* Suffrian. **23)** *Metachroma clarkei* Blake, lightly marked specimen. **24)** *Metachroma clarkei*, heavily marked specimen. **25)** *Cryptocephalus catharinae*, new species. **26)** *Cryptocephalus irroratus* Suffrian. **27)** *Cryptocephalus kirki*, new species.

**Plant associations.** This beetle species has been associated with various plants in the family Solanaceae (Clark et al. 2004). As indicated above, specimens in the Cayman Islands have been collected from the solanaceous plant *Datura metel* L.

**Comments.** The color pattern of the Cayman Islands specimens varies somewhat. In four of the five specimens, the elytra have a broad, irregularly shaped, black band beginning near the lateral margin and extending across the suture; the elytral apex is also black (Fig. 1). In the fifth specimen, the would-be band of each elytron is broadly interrupted by yellow and thus forms a lateral longitudinal stripe, plus a second longitudinal stripe that is confluent with the stripe of the other elytron (Fig. 2). The elytral pattern of this specimen is like that of the similar and perhaps synonymous species *L. confusa*. In three



**Figures 28-32.** Dorsal habitus. **28)** *Cryptocephalus paulotigrinus*, new species, pale form. **29)** *Cryptocephalus paulotigrinus*, dark form. **30)** *Diachus auratus* (Fabricius). **31)** *Pachybrachis* sp. 1. **32)** *Pachybrachis* sp. 2.

of the five specimens, the head and prothorax are nearly all black. However, in two of the specimens (including the specimen with the broadly interrupted elytral marking), the posterior portion of the head and much of the prothorax, except for dark lateral maculae and a median pronotal stripe, are pale brown. In earlier works, *L. trabeata* was treated as a subspecies, variety, or strict synonym of *L. confusa*. White (1993) elevated *L. trabeata* to species rank, distinguishing it from *L. confusa* based on the extent of the dark elytral markings. However, his justification for this taxonomic change is not altogether convincing. In fact, he stated that some specimens of *L. trabeata* “are essentially identical with *L. confusa*” and that he had “not been able to find characters that will distinguish them from *L. confusa*.” Future investigation may show that the two supposed taxa are no more than color forms of a single variable species.

#### Subfamily Cassidinae, Tribe Chalepini

##### *Chalepus sanguinicollis* (Linnaeus)

(Figure 3)

*Hispa sanguinicollis* Linnaeus 1771: 530.

*Odontota axillaris* Jacquelin du Val 1857: 313.

*Odontota stigmula* Chapuis 1877: 11.

*Chalepus* (*Chalepus*) *scutellaris* Pic 1931: 14.

*Chalepus sanguinicollis*, var. *australis* Uhmman 1935: 239.

*Chalepus hebalus* Sanderson 1951: 160.

**Diagnosis.** Adults are black with the prothorax and base of the elytra red. This coloration alone is sufficient to distinguish this species from all other chrysomelids known to occur in the Cayman Islands.



**Figures 33-38.** Aedeagi, dorsal, ventral, and lateral aspects. **33)** *Nyctiplanctus bifasciatus*, new species. **34)** *Apraea luciae*, new species. **35)** *Apraea priscilae*, new species. **36)** *Longitarsus alisonae*, new species. **37)** *Megistops adiae*, new species. **38)** *Syphrea thurstonae*, new species.

The red elytral markings vary dramatically in extent. In some specimens they are limited to the humeri and adjacent area. In others, they extend most of the elytral length, leaving only the elytral apex black. In most, they are intermediate between these extremes.

**Material examined.** None from the Cayman Islands. The specimen illustrated in Figure 3 is from Cuba.  
**Extralimital distribution.** This species occurs in the United States (Florida) and is widespread in the West Indies, as well as in mainland America from Mexico to Argentina (Takizawa 2003, Staines 2009).





**Figures 39-41.** Aedeagi, dorsal, ventral, and lateral aspects. **39)** *Metachroma clarkei* Blake. **40)** *Cryptocephalus catharinae*, new species. **41)** *Cryptocephalus kirki*, new species.

**Plant associations.** This species has been associated with various species of Poaceae, including *Digitaria insularis* (L.) Mez ex Ekman, *Panicum leucophaeum* Kunth, *Paspalum densum* Poir., and *Sorghastrum setosum* (Griseb.) Hitchc. (Clark et al. 2004).

**Comments.** Although we have not examined any Cayman Islands specimens and are not aware of any literature records, Lyle Buss (personal communication) has sent us a photograph of a specimen that was collected there. He did not send an actual specimen, but we have no doubt regarding the identification. Some publications, such as Wilcox (1975), recognize three subspecies of *C. sanguinicornis*: *C. sanguinicornis sanguinicornis* (Linnaeus), *C. sanguinicornis axillaris* Jacquelin du Val, and *C. sanguinicornis australis* Uhmann. However, in a personal communication from Charles L. Staines, a taxonomic specialist on leaf mining Cassidinae, he states that he regards all of these as mere color forms of a single variable species, and that he cannot find any consistent morphological characters to warrant their separation into distinct taxa.

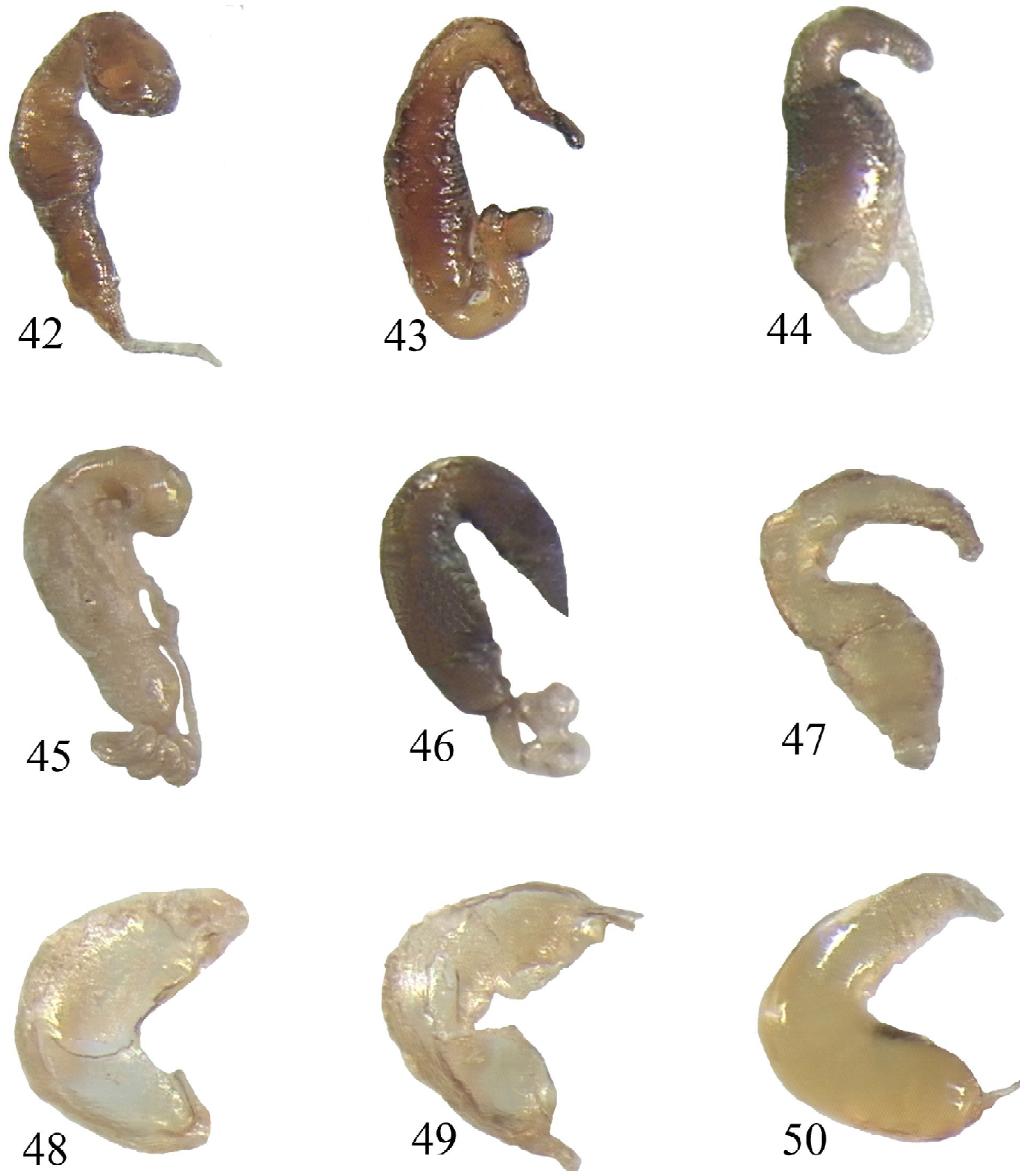
#### Subfamily Cassidinae, Tribe Ischyrosomychini

#### *Physonota (Eurypepla) jamaicensis* (Linnaeus)

(Figure 4)

*Cassida jamaicensis* Linnaeus 1758: 364.

**Diagnosis.** The broadly explanate prothorax and elytral epipleura result in the roundish dorsal habitus of this species (Fig. 4). This, in combination with the comparatively large body size (approximately 1 cm long), the simple (not toothed) tarsal claws of all legs, and the basal margin of each elytron that is finely crenulate for much of its length, is adequate to distinguish this species from others that are known from the Cayman Islands. The prothorax is not ventrally grooved for reception of the antennae. The color is



**Figures 42-50.** Spermathecae. **42)** *Nyctiplanctus bifasciatus*, new species. **43)** *Apraea luciae*, new species. **44)** *Longitarsus alisonae*, new species. **45)** *Megistops adiae*, new species. **46)** *Syphrea thurstonae*, new species. **47)** *Metachroma clarkei* Blake. **48)** *Cryptocephalus catharinae*, new species. **49)** *Cryptocephalus kirki*, new species. **50)** *Cryptocephalus paulotigrinus*, new species.

mostly yellow, but with a few dark, sometimes faint spots. A few specimens have a faint metallic sheen. This sheen is much more pronounced in live beetles.

**Material examined.** Cayman Islands, Grand Cayman, Boatswain Point, Lime Tree Estate, 21-VI-1976, E. J. Gerberg (2, FSCA); Cayman Islands, Grand Cayman, Botanic Garden, 4-VI-2008, M. C. Thomas, R. H. Turnbow, B. K. Dozier, blacklight trap (1, FSCA); Cayman Islands, Grand Cayman, Georgetown, UCCI campus, 2-VI-2008, M. C. Thomas, beating at night (2, FSCA); Cayman Islands, Grand Cayman, Georgetown, UCCI campus, 3-VI-2008, M. C. Thomas, at light (1, FSCA); Cayman Islands, Grand Cayman Growers, east end of island, 7-IX-2009, V. Hanraj, on Geiger tree (2, BYUC; 3, FSCA).

**Extralimital distribution.** Hispaniola, Jamaica, Puerto Rico (Blake 1966, Takizawa 2003).

**Plant associations.** Virkki et al. (1992) reported this species in Puerto Rico from *Cordia* (Boraginaceae). Edward G. Riley (personal communication) has seen a specimen from Grand Cayman that was associated with *Cordia sebestena* L. Five of the specimens listed above were also collected from Geiger tree (*Cordia*).

**Comments.** The name *Euryepepla* Boheman has been variously treated in recent years. Although, Borowiec (1999) listed it at generic rank in his monumental catalog, we have chosen to follow Riley et al. (2003) who treated it at subgeneric rank.

In addition to material we have examined, Edward G. Riley (personal communication) has seen a specimen with a short, dark, median streak on the pronotum, similar to that found on specimens from the Yucatan Peninsula of Mexico. Data are as follow: Grand Cayman Island, Georgetown, 23-II-1980, W. Carter, on *Cordia sebestena* (1 specimen, EGRC). The Cayman Islands specimens we have seen also have such a median streak. In this character, the specimens differ from the original description of *P. jamaicensis* (type locality "America" but here presumed to be Jamaica). The subgenus *Euryepepla* Boheman occurs elsewhere in the West Indies, as well as on mainland North America (Florida). In many instances, specimens from each area are very similar to those found in other parts of the subgeneric distribution, although exhibiting slight differences. It is unclear whether or not they should be recognized as distinct species. At this time, we have assigned the Cayman Islands material to *P. jamaicensis*, but further study may prove this to be incorrect.

### Subfamily Cassidinae, Tribe Cassidini

#### *Charidotella jamaicensis* (Blake)

*Metriona quadrisignata jamaicensis* Blake 1966: 220.

**Diagnosis.** As with other species in the tribes Ischyrosonychini and Cassidini (tortoise beetles), the prothorax is broadly explanate, completely covering the head in dorsal view. The elytral epipleura are also broadly explanate, resulting in the roundish dorsal shape. In the genus *Charidotella*, the tarsal claws, at least those of the front legs, are appendiculate (toothed), the basal margin of each elytron is smooth (not finely crenulate), and the prothorax is not grooved for reception of the antennae. These characters are sufficient to distinguish *C. jamaicensis* from other chrysomelid species known to occur in the Cayman Islands. The color of *C. jamaicensis* is yellowish with a large dark macula on each elytron. In well-marked specimens of *Charidotella sexpunctata* (Fabricius), a widespread and common species that may eventually be found in the Cayman Islands, each elytron has three small dark spots. In lightly colored specimens of the genus, the dark marking may not be visible from above, and the elytra may need to be removed to enable viewing of these features from the underneath side.

**Material examined.** None.

**Extralimital distribution.** Bahamas, Hispaniola, Jamaica (Takizawa 2003, Borowiec 2011).

**Plant associations.** Blake (1966) reported Jamaican specimens collected from *Jacquemontia pentantha* (Jacq.) G. Don (Convolvulaceae). Borowiec (1999) similarly stated *J. pentantha* to be the host, based on previously unpublished data. Virkki et al. (1992) reported the host of possible synonym *Charidotella quadrisignata* (Boheman) in Puerto Rico to also be *J. pentantha*, and this was accepted as a valid association in the catalog of Borowiec (1999).

**Comments.** The nomenclature and identity of Cayman Islands material are unclear. Blake (1966) originally proposed *M. quadrisignata jamaicensis*, based on material from the type locality (Portland Cottage, Clarendon Parish, Jamaica), on material from a second locality in Jamaica, and on material from Grand Cayman. Borowiec (1989) transferred *Coptocyclus quadrisignatus* (Boheman) (originally described from Cuba and Hispaniola, subsequently included in *Metriona*) to *Charidotella* Weise, and he treated *M. quadrisignata jamaicensis* as a junior synonym. Later, Borowiec (1999) treated *C. jamaicensis* as a valid species, separate from *C. quadrisignata*, but without presenting any justification for this taxonomic



change, and he listed *C. jamaicensis* only from Jamaica. Still later, Borowiec (2009) indicated that the species *Charidotella latevittata* (Boheman) is known only from Hispaniola and the Cayman Islands. The listing from the Cayman Islands may have been a mistake. In Borowiec's 1999 publication he did not mention the Cayman Islands in the distribution of *C. latevittata*, but instead indicated the distribution to be only on the islands of Hispaniola and Saint Thomas. Whatever the case, in the 2009 publication, he stated that *C. quadrisignata jamaicensis* is probably a junior synonym of *C. latevittata*. If *C. quadrisignata*, *C. quadrisignata jamaicensis*, and *C. latevittata* are all determined to be synonyms, the valid name is likely to be *C. quadrisignata*. The two older names, *C. quadrisignata* and *C. latevittata*, were proposed in the same publication, but *C. quadrisignata* is likely to be selected by a reviser, as it appeared first in the publication (Boheman 1855). Although page priority is not dictated by the rules of nomenclature, many revisors tend to adhere to this policy. Very recently, Borowiec (2011) again treated *C. jamaicensis* as a valid species, distinct from *C. quadrisignata*. In our treatment, we follow this most recent treatment, although the distribution of *C. jamaicensis* was stated to be Hispaniola and Jamaica, without mention of the Cayman Islands.

As already noted, Blake (1966) reported "*Metriona quadrisignata jamaicensis*" from Grand Cayman. She did not state how many Cayman Islands specimens she had seen, nor did she say where the material was deposited. Much of the chrysomelid material that she studied was from the United States National Museum of Natural History. However, the chrysomelid curator there was unable to find Cayman Islands specimens determined as either *Metriona* or *Charidotella* (Alexander S. Konstantinov, personal communication). We have not examined any Cayman Islands specimens of this species.

### ***Deloyala guttata* (Olivier)**

(Figure 5)

*Cassida guttata* Olivier 1791: 383.

*Cassida signifer* Herbst 1799: 313.

*Cassida fuliginosa* Olivier 1808: 971.

*Coptocyclus extensa* Boheman 1855: 261.

*Coptocyclus hamulata* Boheman 1855: 316.

*Coptocyclus lugubrina* Boheman 1855: 317.

*Coptocyclus immuntia* Boheman 1855: 318.

*Coptocyclus trabeata* Boheman 1855: 319.

*Coptocyclus immunda* Boheman 1855: 320.

*Coptocyclus lucidula* Boheman 1855: 321.

*Coptocyclus glabricula* Boheman 1855: 341.

*Chirida signifera bohemani* Spaeth 1914: 124.

*Chirida signifera*, ab. *pennsylvanica* Spaeth 1914: 124 [unavailable name].

*Chirida guttata columbica* Spaeth 1936: 139.

**Diagnosis.** As with other species in the tribes Ischyrosomychini and Cassidini (tortoise beetles), the prothorax is broadly explanate, completely covering the head in dorsal view. The elytral epipleura are also broadly explanate, resulting in the roundish dorsal shape. In this species, each tarsal claw is simple, although appearing to be appendiculate due to distally projecting flanks of the distal tarsomere. The basal margin of each elytron is finely crenulate for much of its distance, and the prothorax immediately laterad to the head is grooved for reception of the antennae. These characters together distinguish this species from all other chrysomelids known to occur in the Cayman Islands. The dorsal coloration is extremely variable. Pale specimens are almost uniformly yellowish brown, with the margins only slightly paler. The elytral disc of dark specimens is black, with this color extending to the anterolateral corners, the paler coloration being limited to the lateral margin behind the anterolateral corners and to the posterior margin. Intermediately colored specimens have the dark area interrupted by pale markings, thereby forming a mottled pattern, and the black areas may be lightened to various shades of brown.

**Material examined.** Cayman Islands, Grand Cayman, 0.7 mi. N Sand Bluff, 20-V-2009, R. Turnbow (1, RHTC).

**Extralimital distribution.** This species is widely distributed, not only in the West Indies, but also throughout much of North, Central, and South America (Riley et al. 2003).

**Plant associations.** This beetle species has been associated with various plants in the family Convolvulaceae (Clark et al. 2004).

**Comments.** Our interpretation of this species follows that of Riley et al. (2003), rather than the more narrow interpretation of Borowiec (1999) who treated most of the Latin American forms as *Deloyala fuliginosa* (Olivier).

### Subfamily Galerucinae, Tribe Galerucini

#### *Erynephala maritima* (LeConte)

(Figures 6-7)

*Galeruca maritima* LeConte 1865: 218.

*Monoxia puncticollis texana* Schaeffer 1932: 237.

**Diagnosis.** The densely pubescent dorsal surface, in combination with the body size (7 mm long), is adequate to distinguish this species from other chrysomelids known from the Cayman Islands. In contrast, the bodies of most species are dorsally glabrous or nearly so. Only *Epitrix fasciata* also has pubescent elytra, but its body is tiny in comparison (1.0-1.5 mm long).

**Material examined.** Cayman Islands, Grand Cayman, 0.7 mi. N Sand Bluff, 20-V-2009, R. Turnbow (1, RHTC).

**Extralimital distribution.** This species occurs not only in the West Indies, but also along the eastern coasts of the United States and Mexico (Riley et al. 2003).

**Plant associations.** This species feeds on various species of Chenopodiaceae and Bataceae (Clark et al. 2004).

**Comments.** The prothorax of the single specimen examined from the Cayman Islands is very malformed (Fig. 7). The pronotum is abruptly deflexed slightly right of the meson. The lateroventrally visible portion of the prothorax, from the point of deflection to the base of the leg, is sculptured like that of the pronotal dorsum, being densely and coarsely punctate. The nearly glabrous and impunctate condition, characteristic of the hypomeron of normal specimens and found on the left side of this specimen, is entirely absent from the right side. The normal specimen illustrated in Figure 6 is from Texas.

### Subfamily Galerucinae, Tribe Metacyclini

#### *Nyctiplanctus bifasciatus*, new species

(Figures 8, 33, 42)

**Diagnosis.** The color alone is sufficient to distinguish this species from all other chrysomelids known to occur in the Cayman Islands, the head and prothorax being orange-brown, and the elytra being black with the apex and a broad transverse band near the middle orange-brown (Fig. 8). Beyond the Cayman Islands, this species is most similar to *Nyctiplanctus jamaicensis* Blake and *Nyctiplanctus farri* Blake, both from Jamaica. Adults of *N. bifasciatus* are larger than those of *N. jamaicensis* (6.8-7.0 mm, compared to 4.0-5.3 mm). They are similar in size to those of *N. farri*, but the elytral humeri are black rather than pale. The pale elytral band of *N. bifasciatus* is wider than that of either of the Jamaican species.

**Description of male.** Form elongate oval. Head, pronotum, scutellum, and venter orange-brown; elytra black with broad, transverse, orange-brown fascia near mid-length, with apex also orange-brown; femora

orange-brown with black apex; tibiae and tarsi black. Body 6.8 mm long, 3.0 mm wide.

Head entirely orange-brown; interocular space about half width of head measured across eyes; occiput and vertex smooth, shining, nearly impunctate, with an impressed median line above well-defined frontal tubercles; frontal carina short, broad, rather flat between antennae; transverse frontal carina broad, well elevated. Eyes narrowly separated from antennal fossae and from base of mandible. Antennae dark piceous, with distal antennomere very slightly paler; basal antennomere longest, about twice as long as second; antennomere 2 shortest; antennomere 4 slightly longer than 3 and than 5; antennomeres 3 and 5-11 subequal in length; antennomeres 1 and 2 sparsely setose; antennomeres 3-11 densely pubescent. Clypeal area, labrum, and palpi yellowish brown, paler than frons and vertex; mandibles pale brown with apex piceous; labrum with six setae arranged in transverse row; distal maxillary palpomere conical.

Pronotum twice as broad as long, 1.2 times as wide as head, widest anteriorly, with setose tubercle at each anterolateral angle and posterolateral angle; color orange-brown; surface without well-developed depressions or callosities; punctation rather dense, fine but distinct; interpunctural areas shining. Scutellum orange-brown, equilaterally triangular, alutaceous.

Elytra together about twice as wide as head, 1.7 times as wide as pronotum, 4.3 times as long as pronotum, 0.7 times as long as entire body. Discal and sublateral costae absent. Color black with broad orange-brown transverse fascia at mid-length, this broadly attaining both sutural and epipleural margins, shortly extending both anteriorly and posteriorly along suture, also extending very narrowly posteriorly along lateral margin, leaving adjacent epipleuron pale; anterior and posterior edges of fascia irregular in shape; apical area of elytron also broadly orange-brown. Punctation minute, noticeable only upon close examination; interpunctural areas shining.

Body beneath entirely orange-brown. Ventral areas of prothorax shining, glabrous; prosternum anterior to coxae narrow, slightly longer than width of basal antennomere; posterior prosternal process very narrowly separating nearly contiguous coxae; procoxal cavities broadly open behind. Mesothorax shining, nearly glabrous. Metepimeron and metepisternum nearly glabrous; metasternum shining, sparsely, distinctly pubescent. Abdomen shining, distinctly, sparsely pubescent; terminal abdominal ventrite mesally truncate at apex. Coxae and trochanters pale orange-brown, sparsely setose; femora sparsely setose, orange-brown with apex black; tibiae and tarsi densely setose, black; basal tarsomere of each leg about as long as more distal tarsomeres combined, not conspicuously widened; tarsal claws appendiculate. Aedeagus as in Figure 33.

**Description of female.** Form and color similar to male, but with terminal abdominal ventrite evenly rounded. Length 7.0 mm. Spermatheca as in Figure 42.

**Material examined. Holotype:** "CAYMAN ISLANDS: Cayman Brac, Bight Rd., Brac Parrot Pres. 24-V-2009, Thomas, Turnbow & Ball, blacklight trap" (male, FSCA). **Paratype:** Cayman Islands, Cayman Brac, Brac Paradise Subdivision, 22-V-2009, Thomas, Turnbow & Ball, bl trap (1 female, BYUC).

**Plant associations.** Unknown. Similar species in the genus have been associated with *Cordia* (Blake 1963).

**Etymology.** The specific epithet is derived from Latin and refers to the elytral color pattern, which can be described as pale with two broad, dark bands.

**Comments.** This genus is endemic to the West Indies. All previously described species are from Cuba, Hispaniola, or Jamaica.

### Subfamily Galerucinae, Tribe Alticini

#### *Altica occidentalis* Suffrian, REINSTATED GENERIC PLACEMENT (Figure 9)

*Haltica occidentalis* Suffrian 1868: 197.

**Diagnosis.** The unicolorous, metallic blue dorsum is sufficient to distinguish this species from all other chrysomelids known to occur in the Cayman Islands.

**Material examined.** Cayman Islands, Grand Cayman, 25-X-1986, P. Fitzgerald, blacklight trap (1, FSCA); Cayman Islands, Grand Cayman, 14-VII-1991, P. Fitzgerald blacklight trap (1, FSCA); Cayman Islands, Grand Cayman, Botanic Park, 2 km S. of Old Man Bay, 19°19'2" N, 81°10'2" W, 20-IX-1993, F. J. Burton, with larvae feeding on leaves of *Ammania* & *Asclepias* (2, BYUC; 10, USNM); Cayman Islands, Grand Cayman, Cayman Growers, 3-VII-2010, K. Palmer, *Amaranthus* sp., KP69B (1, BYUC; 4, FSCA).

**Extralimital distribution.** This species has been reported from Cuba, Dominica, Hispaniola, Jamaica, Puerto Rico, Saint Lucia, and the Virgin Islands (Takizawa 2003). However, our examination of specimens from the more southern islands suggests that they may belong to a different species.

**Plant associations.** The above-mentioned record from *Ammania* (Lythraceae) is probably valid, but the occurrences on *Amaranthus* (Amaranthaceae) and *Asclepias* (Asclepiadaceae) may have been incidental. Published host records include *Cuphea carthaginensis* (Jacq.) J. F. Macbr. and *Jussiaea* [= *Ludwigia*] (both Onagraceae) (Blake 1964; Virkki and Santiago-Blay 1994, 1998).

**Comments.** In recent years, this species has been treated in the genus *Lysathia* Bechyné. This placement may have been extrapolated from Blake's (1964) statement that, "It is of the same elongate shape as *A. ludoviciana* Fall" (*Altica ludoviciana* is now correctly placed in *Lysathia*). Although Blake's comment is true, the two species, other than shape, are quite different. Suffrian's species should be returned to *Altica* Geoffroy. Based mostly on characters of the male genitalia, José Santisteban (personal communication) concurs with this opinion.

#### ***Apraea luciae*, new species**

(Figures 10, 34, 43)

**Diagnosis.** The hind femora of this species are greatly enlarged, the large eyes are narrowly separated dorsally by a distance about equal to the width of the basal antennomere, and the rather coarse pronotal punctures are similar in size and density to those of the elytra. This combination of characters is not found in any other species of Chrysomelidae known from the Cayman Islands. Compared with *A. priscilae* (the only other species of the genus known from the Cayman Islands), the body is larger (4.3-5.2 mm, as opposed to 3.4-3.7 mm long), the color is dark brown instead of yellowish brown with dark elytral markings, the pronotal punctation is much denser and coarser, and the elytral punctation is coarser and arranged in rows only laterally and distally. Beyond the Cayman Islands, the large size, narrowly separated eyes, dark brown color, and confusedly punctate yet hardly costate elytra distinguish *A. luciae* from all other described species in the genus.

**Description of male.** Body oval, dorsally glabrous; color dark brown; dorsal punctures deep, largely confused, with some of those on elytra tending to form poorly defined rows. Length 4.3 mm; width across humeri 2.3 mm.

Head with eyes large, dorsally separated by slightly less than width of antennomere 1, separated by a distance about 0.1 times maximum width of head; color dark brown; longitudinal, distinctly elevated ridge present between eyes; frontal tubercles small, triangular; frontal ridge flat, narrow between antennae, broadly, triangularly expanded beyond antennae, with expanded area glabrous except distally; clypeal area shining, reflexed beyond level of frons, armed with transverse row of setae. Antennae pale brown, slender, extending to near middle of elytra, composed of eleven antennomeres; antennomere 1 elongate, curved, largely glabrous; antennomere 2 short, slightly longer than wide, largely glabrous; antennomeres 3-11 densely setose, subequal in length to each other, though antennomere 3 shorter and antennomere 11 longer than others. Labrum brown, slightly paler than frons, with four setae arranged in transverse row, with apical margin slightly bisinuate, therefore vaguely trilobed; mandibles piceous; maxillary and labial palpi pale yellow-brown.

Pronotum 2.1 times as wide as long, 1.8 times as wide as head across eyes, nearly as wide as elytra at humeri; anterior margin with fine bead; lateral margins arcuate, each with well-defined carina; posterior margin bisinuate, with well-defined but fine bead; discal punctures coarse; interspaces appearing polished but upon close inspection vaguely alutaceous; color dark brown. Scutellum subtriangular, dark brown, in some specimens darker in lateral and posterior areas.

Elytra together 1.4 times as long as width at humeri, 3.5 times as long as pronotum. Punctuation of each elytron largely confused but tending to form rows, especially in lateral and distal areas; punctures deeply impressed to apex; humeral area largely impunctate. Interpunctural areas appearing polished, but upon close inspection minutely punctulate and very slightly alutaceous. Color dark brown.

Ventral areas dark brown, similar in color to dorsum. Prothorax with hypomeron shining, glabrous; prosternum anterior to coxae short, about as long as width of antennomere 3; prosternal process between coxae about as wide as length of antennomere 3; procoxal cavities widely open behind. Ventral areas of mesothorax largely glabrous. Ventral areas of metathorax largely setose. Ventral areas of abdomen, pubescent, alutaceous; mesal area of last abdominal ventrite shallowly flattened, with dark brown fine mesal line, with apex of segment trilobed. Legs alutaceous, covered with setae, dark brown with tarsi paler; front and middle basitarsi distinctly broader than those of female; tarsal claws appendiculate. Aedeagus as in Figure 34.

**Description of female.** Form and appearance similar to male, but with differences as follow. Pronotum twice as wide as long, 1.8 times as wide as head across eyes, 0.9 times as wide as elytra across humeri. Elytra together about 1.5 times as long as wide at humeri, 3.6 times as long as pronotum. Front and middle basitarsi distinctly narrower than those of male. Tip of abdomen rounded or slightly angulate, not trilobed; last abdominal ventrite not flattened and without dark mesal line. Spermatheca as in Figure 43. Length 5.2 mm; width at humeri 2.6 mm.

**Material examined. Holotype:** "CAYMAN: Little Cayman .3 km. SE Spot Bay, bl trap, 26 May 2009, Thomas, Turnbow & Ball" (male, FSCA). **Paratypes:** Cayman Islands, Cayman Brac, Hemmington Rd., 8-VI-2008, M. C. Thomas, R. H. Turnbow, B. K. Dozier, blacklight trap (1 male, FSCA); Cayman Islands, Cayman Brac, Hemmington Road at Songbird Drive, 24-V-2009, Thomas, Turnbow & Ball, blacklight trap (2 males, FSCA); Cayman Islands, Cayman Brac, Major Donald Dr., 0.6 km E jct. Ashton Reid Dr., 5-VI-2008, R. Turnbow (1 male, RHTC); Cayman Islands, Cayman Brac, Major Donald Dr., 0.6 km E jct. Ashton Reid Dr., 6-VI-2008, M. C. Thomas, R. H. Turnbow, B. K. Dozier, blacklight trap (2 females, FSCA); Cayman Islands, Cayman Brac, Major Donald Dr., 0.6 km E jct. Ashton Reid Dr., 7-VI-2008, R. Turnbow (1 female, RHTC); Cayman Islands, Little Cayman, North Coast Road, 0.1 km west Olivine Kirk Dr., 26-V-2009, Thomas, Turnbow & Ball, blacklight trap (4 males, 7 females, FSCA); Cayman Islands, Little Cayman, North Coast Rd., 0.1 km W jct. Olivine Kirk Rd., 27-V-2009, Thomas, Turnbow & Ball, bl trap (1 male, 1 female, BYUC; 3 males, 5 females, FSCA); Cayman Islands, Little Cayman, 0.3 km SE Spot Bay, 26-V-2009, Thomas, Turnbow & Ball, bl. trap (2 males, 1 female, BYUC; 8 males, 6 females, FSCA).

**Plant associations.** Unknown.

**Etymology.** The species epithet of this taxon honors the mother of the third author.

**Comments.** This genus is endemic to the West Indies. No doubt, many species are yet to be described.

***Apraea priscilae*, new species**  
(Figures 11, 35)

**Diagnosis.** The greatly enlarged hind femora, in combination with the color of each elytron (yellowish brown, with dark humeri and with an elongate, median dark marking beginning near mid-length and extending to near the base of the apical declivity), are sufficient to distinguish this species from all other chrysomelids known to occur in the Cayman Islands. Compared with *A. luciae* (the only other species of the genus known from the Cayman Islands), the body is smaller (3.4-3.7 mm, as opposed to 4.3-5.2 mm

long), the color is mostly pale yellowish brown instead of dark brown, and the elytral punctation is finer and largely arranged in regular rows. Beyond the Cayman Islands, *A. priscilae* is quite similar to *Apraea anneae* Blake, a species from Jamaica. However, the pronotum of *A. priscilae* is shorter, and the posterior elytral marking is larger and elongate, as opposed to small (or absent) and nearly round. There are also slight differences in the aedeagi.

**Description.** Body oval, dorsally glabrous; color light brown. Each elytron with dark brown circular spot on each humerus and with elongate dark brown medium macula behind middle; dorsal punctures deep, those on elytra arranged in slightly irregular rows. Length 3.4-3.7 mm; width across humeri 1.8 mm.

Head light brown; eyes large, dorsally separated at nearest point by about half length of antennomere 1; vertex between eyes, convex; frontal tubercles small, triangular; frontal ridge flat, narrow between antennae, broadly, triangularly expanded beyond antennae; expanded area of frontal ridge concave, pubescent; clypeal area reflexed beyond level of frons. Antennae pale brown, slender, extending to near middle of elytra, composed of eleven antennomeres; antennomere 1 elongate, curved, shining, nearly glabrous; antennomere 2 short, globular, nearly glabrous; antennomeres 3-11 elongate, densely pubescent, each about half as long as antennomere 1. Labrum pale brown, with four setae arranged in transverse row, with apical margin truncate and straight; mandibles piceous; maxillary and labial palpi pale yellow-brown.

Pronotum 2.0 times as wide as long, 1.8 times as wide as head across eyes, about as wide as elytra across humeri; anterior margin with fine bead; lateral margins arcuate, with strongly developed, carinate bead; posterior margin bisinuate, with well-defined but narrow bead; principal discal punctures well separated; interspaces minutely punctulate, appearing polished; color light brown. Scutellum subtriangular, pale brown.

Elytra 3.5 times as long as pronotum. Principal punctures of each elytron deeply impressed to apex, arranged in ten slightly irregular rows plus short subscutellar row; humerus impunctate. Interpunctural area polished, with scattered fine punctures. Color pale brown with humerus dark brown, also with median, elongate, dark brown macula extending from near mid-length to base of apical declivity.

Ventral areas brown, noticeably darker than dorsum; prothorax with hypomeron glabrous, shining; prosternum anterior to coxae short, about as long as width of antennomere 3; prosternal process separating coxae by distance slightly greater than width of antennomere 1. Ventral areas of mesothorax alutaceous, largely glabrous. Ventral areas of metathorax setose. Ventral areas of abdomen impunctate, shining, pubescent, alutaceous; mesal area of last abdominal sternite with dark brown fine mesal line, with apex of segment trilobed. Legs pale brown, alutaceous, sparsely setose on femora, densely setose on tibia; tarsal claws appendiculate. Aedeagus subtruncate near apex, with small median lobe at apex (Fig. 35).

**Material examined. Holotype:** "CAYMAN IS: Grand Cayman Botanic Garden 9-VI-2008 M. C. Thomas, R. H. Turnbow, B. K. Dozier, blacklight trap" (male, FSCA). **Paratype:** Cayman Islands, Grand Cayman, Queen Elizabeth Botanic Garden, outside of entrance, 19-V-2009, M. C. Thomas, night beating (1 male, BYUC).

**Plant associations.** Unknown.

**Etymology.** The species epithet of this taxon honors the sister of the third author.

**Comments.** Although clearly belonging to the same genus, this species is quite different in appearance from *Apraea luciae* (see remarks in the above diagnosis).

***Chaetocnema brunnescens jamaicensis* Blake**

(Figure 12)

[*Chaetocnema brunnescens* Horn 1889: 259 – extralimital nominotypical subspecies].  
*Chaetocnema brunnescens jamaicensis* Blake 1969: 166.



**Diagnosis.** The body of this species is small (less than 2 mm long), the hind femora are greatly enlarged, the vertex is conspicuously, evenly punctate, and the elytra are striately punctate and not pubescent. This combination of characters is not found in any other species of Chrysomelidae known to occur in the Cayman Islands.

**Material examined.** Cayman Islands, Cayman Brac, West End Point, 7-VI-2008, R. Turnbow (1, RHTC); Cayman Islands, Grand Cayman, CI Botanic Garden, 8-VI-2008, Thomas & Turnbow, bl trap (1, RHTC); Cayman Islands, Grand Cayman, Georgetown, UCCI, 29-V-2009, Thomas, Turnbow & Ball, blacklight trap (1, FSCA); Cayman Islands, Grand Cayman, Georgetown UCCI, 3-VI-2008, R. Turnbow, at light (1, RHTC); Cayman Islands, Grand Cayman, Governor Gore's Pond, 28-V-2009, R. Turnbow (1, FSCA); Cayman Islands, Grand Cayman, Gun Bay, 20-V-2009, M. C. Thomas (24, FSCA); Cayman Islands, Grand Cayman, Mastic Trailhead S, 20-V-2009, R. Turnbow (2, BYUC; 6, FSCA); Cayman Islands, Grand Cayman, Mastic Trailhead S, 21-V-2009, R. Turnbow & Ball, bl trap (12, FSCA); Cayman Islands, Grand Cayman, Meagre Bay Pond, 4-IV-1997, S. A. Wells (10, BYUC); Cayman Islands, Grand Cayman, 0.7 mi. N. Sand Bluff, 20-V-2009, R. Turnbow (4, BYUC; 16, FSCA); Cayman Islands, Little Cayman, 2.4 km E Blossom Village, 26-V-2009, R. Turnbow (1, BYUC; 2, FSCA); Cayman Islands, Little Cayman, North Coast Rd., 0.1km W jct. Olivine Kirk Rd., 27-V-2009, Thomas, Turnbow & Ball, bl trap (1, FSCA).

**Extralimital distribution.** This species has been recorded from The Bahamas, Cuba, Hispaniola, Jamaica, Puerto Rico, the Virgin Islands, and the U.S.A. (Florida) (Takizawa 2003, Peck 2005). Specimens from Florida are referable to *C. brunnescens brunnescens*, while those from the West Indies are referable to *C. brunnescens jamaicensis*.

**Plant associations.** Outside of the Cayman Islands, this species has been reported in association with *Conocarpus erectus* L. and *Laguncularia racemosa* (L.) Gaertn. f. (both Combretaceae) and with *Rhizophora mangle* L. (Rhizophoraceae) (Clark et al. 2004).

**Comments.** *Chaetocnema brunnescens brunnescens* from Florida differs only slightly from *C. brunnescens jamaicensis*, the nominate subspecies being paler and with slightly coarser punctation (Blake 1969, White 1996).

### ***Chaetocnema confinis* Crotch**

(Figure 13)

*Chaetocnema confinis* Crotch 1873: 75.

*Chaetocnema flavicornis* LeConte 1878: 418.

*Chaetocnema perplexa* Blake 1941: 177. **NEW SYNONYMY.**

*Chaetocnema etiennei* Jolivet 1979: 641.

**Diagnosis.** The body of this species is small (about 1.5 mm long), the hind femora are greatly enlarged, the alutaceous vertex has a few punctures near each eye but is medially impunctate, and the elytra are striately punctate and not pubescent. This combination of characters is not found in any other species of Chrysomelidae known to occur in the Cayman Islands.

**Material examined.** Cayman Islands, Grand Cayman, George Town, Green Thumb Nur., 7-XII-2009, N. Hansraj (1, FSCA).

**Extralimital distribution.** Blake (1941) reported *C. perplexa* (here regarded as a synonym of *C. confinis*), or beetles closely resembling both *C. perplexa* and mainland North American *C. confinis*, from Bermuda, Cuba, Hispaniola, Jamaica, and Puerto Rico. In recent years, *C. confinis* has apparently spread to many areas around the world, especially in tropical latitudes (Jolivet 2004).

**Plant associations.** This beetle species feeds on various plants in the family Convolvulaceae (Clark et al. 2004).

**Comments.** Blake (1941) described *C. perplexa*, distinguishing it from continental North American *C. confinis*, based solely on minor differences in the aedeagus. She stated that the two taxa are externally indistinguishable. She also stated that females, unassociated with males, are frequent in the West Indies. Entirely based on the West Indian distribution, we believe these unassociated females to be more likely *C. perplexa* than *C. confinis*. In more recent years, beetles reported to be *C. confinis* have apparently spread to far-flung parts of the world; however, populations in these new areas are parthenogenetic, entirely without males (Jolivet 2004). It seems more likely that these populations originated from the West Indies, where males are rare and perhaps even absent from some islands, than from mainland North America where both sexes are common. Whatever the case, Jolivet (2004) suggested that the two names are synonymous, in spite of the minor aedeagal differences that have been reported. We concur with this view and hereby formalize the synonymy, although recognizing that a careful taxonomic reevaluation may someday result in reinstatement of the two names.

***Disonycha spilotrachel* Blake**

(Figure 14)

*Disonycha spilotrachel* Blake 1928: 96.

**Diagnosis.** The greatly enlarged hind femora, in combination with the regularly vittate elytra, immediately distinguish this species from all other chrysomelids known to occur in the Cayman Islands.

**Material examined.** Cayman Islands, Little Cayman, south coast near Diggary Point, 19°42'22" N, 80°01'27" W, 20-XI-1993, F. J. Burton, clustered with larvae on severely defoliated *Turnera ulmifolia* (1, BYUC; 5, USNM).

**Extralimital distribution.** Cuba, Hispaniola, and Puerto Rico (Takizawa 2003). We have also examined specimens from Great Inagua in the Bahamas (BYUC, previously unpublished data).

**Plant associations.** In Puerto Rico, this species has been associated with *Ipomoea imperati* (Vahl.) Griseb. (Convolvulaceae), *Passiflora foetida* L. (Passifloraceae), and *Turnera ulmifolia* L. (Turneraceae) (Virkki 1980, 1988). As noted above, *T. ulmifolia* is also a host in the Cayman Islands.

**Comments.** It is interesting that this comparatively showy species is represented by a single collection among the Cayman Islands material we have examined. Very likely, there are numerous other species that we have not seen at all.

***Epitrix fasciata* Blatchley**

(Figure 15)

*Crioceris parvula* Fabricius 1801a: 486.

*Epitrix fasciata* Blatchley 1918: 56.

**Diagnosis.** The body of this species is small (1.0-1.5 mm long), the hind femora are greatly enlarged, and the elytra are pubescent and striately punctate. This combination of characters is not found in any other species of Chrysomelidae known to occur in the Cayman Islands.

**Material examined.** Cayman Islands, Grand Cayman, Georgetown, 10-V-2010, J. Steer, *Lycopersicon esculentum* (4, BYUC; 14, FSCA); Cayman Islands, Grand Cayman, Mastic Trail S., 20-29 May 2009, R. Turnbow, FIT (2, RHTC).

**Extralimital distribution.** This species occurs not only in the West Indies, but also in the southeastern United States, Mexico, Central America, and South America (Riley et al. 2003, Takizawa 2003). Additionally, it has spread to Hawaii and Europe (Riley et al. 2003, Döberl 2010).

**Plant associations.** These beetles are normally associated with Solanaceae, having been recorded from various species in that family (Clark et al. 2004). As noted above, some of the Cayman Islands beetles were collected from the solanaceous plant *Lycopersicon esculentum* Mill., which is tomato.

**Comments.** The above-listed name *Crioceris parvula* is much older than *E. fasciata*. Even so, we have chosen to retain the usage of the younger name for this species. This is because of some uncertainty regarding the synonymy and the true identity of *C. parvula* (see White and Barber 1974). Workers such as Riley et al. (2003) call attention to the homonymy of *Crioceris parvula* with *Galeruca parvula* Paykull 1799. However, this is secondary homonymy. When the two names were both included in the genus *Altica* Geoffroy (unjustifiably amended *Haltica*), this homonymy was important. Now, when Paykull's name is placed in *Longitarsus* Berthold and Fabricius' name in *Epitrix* Foudras, the issue is irrelevant.

### ***Longitarsus alisonae*, new species**

(Figures 16, 36, 44)

**Diagnosis.** In this species, the hind femora are greatly enlarged, the basal tarsomere of each hind leg is about half as long as the hind tibiae, and the elytra are slightly truncate, leaving much of the apical abdominal tergite uncovered. This combination of characters distinguishes this species from all other chrysomelids known to occur in the Cayman Islands. Beyond the Cayman Islands, this species is quite similar to *L. chlanidotus* Blake, a species that was originally described based on material from Puerto Rico, Jamaica, and the Florida Keys. *Longitarsus alisonae* differs from *L. chlanidotus* in having a slightly smaller prothorax in comparison to the size of the body, in having more prominent elytral humeri, in having more of the apical abdominal tergite uncovered, and in having the elytra entirely pale or with at most the extreme sutural and lateral margins darkened (the elytra of many, but not all, specimens of *L. chlanidotus* have broad sutural and lateral dark markings).

**Description of male.** Body 1.6 mm long. Pronotum 1.2 times as wide as long. Elytra 2.1 times as long as wide, 3.0 times as long as pronotum.

Head pale brown; antennomeres 1-4 usually yellow, 5-11 dark brown; mandibles pale brown, darker at tip; maxillae with distal palpomeres darker brown than more basal palpomeres. Pronotum and scutellum yellowish brown, lighter in color than head. Elytra yellowish brown, lighter than pronotum, with suture narrowly darker. Venter with prothorax, mesothorax, and abdomen pale yellowish brown, with metathorax slightly darker. Legs pale yellowish brown, with distal tarsomeres of front and middle legs darker.

Head with surface of vertex impunctate, shining. Antennal (frontal) calli strongly delimited laterally, less distinctly defined posteriorly. Eyes oval, small, in frontal view separated from antennae by distance nearly equal to their individual width, in lateral view separated from base of mandible by about half their maximum diameter. Antennomeres 1 and 11 subequal in length, longer than others; 2 slightly swollen, shortest; 3 and 4 subequal in length; 5-10 subequal in length. Maxillary palpomere 2 distinctly swollen; palpomere 3 conical.

Pronotum rather strongly convex and rounded downwards at sides, narrow at base, gradually widening to post-apical angulations, thence abruptly narrowed to anterior margin; pronotal disc conspicuously, rather coarsely punctured, with punctures separated by distance about equal to their diameters. Scutellum subtriangular, obtusely angled behind.

Elytra very densely punctate basally, with punctures similar in size and separation to those of pronotum, distally more shallow, apically obsolete; shape strongly rounded downwards laterally; humeri well developed; epipleura facing subventrally, wide in basal half, thence strongly tapered apically; elytral apex truncate, leaving much of posterior abdominal tergite exposed. Hind wings well developed.

Ventral areas with pronotal hypomeron polished, vaguely alutaceous upon close examination; prosternum anterior to coxa about half as long as coxa; prosternal process between coxae about as wide as antennomere 3; procoxal cavities broadly open behind. Metasternum glabrous, polished. Abdomen glabrous, polished; terminal ventrite with quadrate apical lobe. Pygidium shallowly punctate, with interspaces alutaceous, with apex truncate. Metatibiae with stout row of spines along apical third of dorsal, outer edge; apical spur prominent. Aedeagus as in Figure 36.

**Description of female.** Color, form, and dimensions similar to those of male, but with differences as follow. Body 1.7 mm long; pronotum as long as wide; elytra 2.0 times as long as wide, 2.8 times as long as pronotum; pygidium and terminal ventrite each narrowed to subangulate apex; spermatheca as in Figure 44.

**Material examined. Holotype:** “CAYMAN ISLANDS: Little Cayman, Coot Marsh, 27-V-2009, Thomas, Turnbow & Ball, blacklight trap” (male, FSCA). **Paratypes:** Cayman Islands, Grand Cayman, Governor Gore’s Pond, 28-V-2009, R. Turnbow (1 female, RHTC); Cayman Islands, Little Cayman, Coot Marsh, 27-V-2009, Thomas, Turnbow & Ball, blacklight trap (1 female, BYUC; 1 female, FSCA).

**Plant associations.** Unknown.

**Etymology.** The species epithet of this taxon honors Alison Clark, daughter of the senior author.

**Comments.** As noted in the above diagnosis, this species is quite similar to *L. chlanidotus*. Among other things, the elytra of both species are slightly truncate, though less so in *L. chlanidotus*. In the original description of that species, Blake (1964) did not mention the slightly truncate elytra, nor did she clearly indicate this condition in her illustration. Nonetheless, our examination of material from Puerto Rico and the Virgin Islands attests to this character for the species. In addition to the specimens included in the type series of *L. alisonae*, we have also seen a single specimen (BYUC) from Jamaica that probably belongs to this new species.

### ***Longitarsus providensis* Blake**

(Figure 17)

*Longitarsus providensis* Blake 1965: 7.

**Diagnosis.** The greatly enlarged hind femora and the unusually long hind basitarsi that are about half as long as the hind tibiae are characteristics of the genus *Longitarsus* and easily distinguish this species from all other chrysomelids known from the Cayman Islands (except for *Longitarsus alisonae*). From other West Indian species of *Longitarsus* (including *L. alisonae*), *L. providensis* is distinguished by the rather coarsely punctate pronotum and elytra, by the alutaceous microsculpture that is especially strong on the pronotum but also present on the vertex and elytra, by the non-truncate elytra that normally cover the abdominal apex, and especially by the distinctive aedeagus that is slightly narrowed before the apex, subtruncate at the apex, and with a small median tooth on the apical margin.

**Material examined.** Cayman Islands, Cayman Brac, Brac Paradise Subdivision, 5-VI-2008, M. C. Thomas, R. H. Turnbow, blacklight trap (4, RHTC); Cayman Islands, Cayman Brac, Major Donald Dr., 0.6 km E. jct. Ashton Reid Dr., 5-VI-2008, M. C. Thomas, R. H. Turnbow, blacklight trap (1, RHTC); Cayman Islands, Grand Cayman, 19-III-1988, P. Fitzgerald, blacklight trap (1, BYUC; 2, FSCA); Cayman Islands, Grand Cayman, 2-IV-1988, P. Fitzgerald, blacklight trap (3, FSCA); Cayman Islands, Grand Cayman, 17-I-1989, P. Fitzgerald bl trap (2, FSCA); Cayman Islands, Grand Cayman, 8-VII-1990, P. Fitzgerald, blacklight trap (2, FSCA); Cayman Islands, Grand Cayman, 28-VII-1990, P. Fitzgerald, blacklight trap (2, FSCA); Cayman Islands, Grand Cayman, 4-VIII-1990, P. Fitzgerald, blacklight trap (1, FSCA); Cayman Islands, Grand Cayman, 19-VIII-1990, P. Fitzgerald, blacklight trap (1, FSCA); Cayman Islands, Grand Cayman, 7-X-1990, P. Fitzgerald, blacklight trap (2, BYUC; 1, FSCA); Cayman Islands, Grand Cayman, 10-V-1992, P. Fitzgerald, blacklight trap (1, FSCA); Cayman Islands, Grand Cayman, 17-V-1992, P. Fitzgerald, blacklight trap (3, FSCA); Cayman Islands, Grand Cayman, VI-1992, P. Fitzgerald, blacklight trap (3, FSCA); Cayman Islands, Grand Cayman, 12-VII-1992, P. Fitzgerald, blacklight trap (1, FSCA); Cayman Islands, Grand Cayman, Botanic Garden, 4-VI-2008, M. C. Thomas, R. H. Turnbow, B. K. Dozier, bl trap (1, FSCA); Cayman Islands, Grand Cayman, Botanic Garden, 9-VI-2008, M. C. Thomas, R. H. Turnbow, B. K. Dozier, bl trap (4, FSCA); Cayman Islands, Grand Cayman, CI Botanic Garden, 8-VI-2008, Thomas & Turnbow, bl trap (3, BYUC; 23, RHTC); Cayman Islands, Grand Cayman, Frank Sound Road, 3-VI-2008, R. Turnbow (1, RHTC); Cayman Islands, Grand Cayman, Georgetown,

UCCI, 2-VI-2008, Thomas & Turnbow, bl trap (1, RHTC); Cayman Islands, Grand Cayman, Governor Gore's Pond, 28-V-2009, R. Turnbow (1, FSCA); Cayman Islands, Grand Cayman, Mastic Trail, 28-V-2009, Thomas, Turnbow & Ball, blacklight trap (5, FSCA); Cayman Islands, Grand Cayman, Mastic Trail, 28-V-2009, R. Turnbow (4, FSCA); Cayman Islands, Grand Cayman, Mastic Trailhead S., 21-V-2009, Thomas, Turnbow and Ball, bl trap (3, FSCA); Cayman Islands, Grand Cayman, Mastic Trailhead S., 27-V-2009, R. Turnbow (5, BYUC; 20, FSCA); Cayman Islands, Grand Cayman, North Side, 19°21'22"N, 81°12'22"W, 22-II-1993, W. E. Steiner & J. M. Swearingen, at black light in forest clearing near coast (1, USNM); Cayman Islands, Grand Cayman, Queen Elizabeth Botanical Garden, 28-V-2009, Thomas, Turnbow and Ball, bl trap (7, FSCA); Cayman Islands, Grand Cayman, Queen Elizabeth Botanical Park, 21-V-2009, Thomas, Turnbow and Ball, bl trap (2, FSCA).

**Extralimital distribution.** Bahamas (Blake 1965).

**Plant associations.** Unknown.

**Comments.** This species was previously known only from the Bahamas. We have compared the Cayman Islands specimens with material collected on Andros Island in the Bahamas, and we find the beetles to be essentially identical.

***Megistops adiae*, new species**

(Figures 18, 37, 45)

**Diagnosis.** The large, apically truncate and bifurcate spur at the apex of each hind tibia is alone sufficient to distinguish this from all other chrysomelid species known to occur in the Cayman Islands. For specimens in which the position of the legs makes this character difficult to see, the large, nearly contiguous eyes, in combination with the greatly enlarged hind femora and essentially impunctate elytra, will also quickly enable identification. Similarly colored species of *Megistops* elsewhere in the West Indies are *M. bahamensis* Blake from the Bahamas, *M. parvula* Blake from Jamaica, and *M. tabebuiae* Blake from Cuba. In comparison with *M. adiae*, the elytral markings of well-marked specimens of *M. bahamensis* are less irregular in shape, and the aedeagus is much more arcuately broadened before the apex. The aedeagus of *M. parvula* is more similar to that of *M. adiae*, but the pale areas of the body are reddish brown instead of yellowish brown, the elytral markings are much smaller, the anterior marking sometimes being entirely absent, and the hind femora are pale (femora largely piceous in *M. adiae*, except for in the pale specimen from Grand Cayman). The aedeagus of *M. tabebuiae* is also similar to that of *M. adiae*, although Blake (1937) illustrated the sclerotized orificial covering as being much wider. The venter of *M. tabebuiae* is described as being yellowish or reddish brown. In *M. adiae*, the venter and hind femora are largely piceous (except for in the palely marked specimen from Grand Cayman).

**Description of male.** Form elongate oval, narrower in front than behind; length 3.0 mm; width 1.7 mm. Head yellowish brown; pronotum yellowish, sometimes marked with vaguely indicated darker maculae; scutellum piceous; each elytron dark piceous with two large yellowish maculae, these sometimes narrowly connected; ventral areas dark brown; legs yellowish brown with hind femora largely darkened. Head with frontal tubercles small, well indicated, separated from each other by distinct sulcus. Frons below antennae flattened. Eyes very large, nearly contiguous above. Antennae filiform, narrowly separated by short ridge; antennomeres 1-3 yellowish brown; intermediate antennomeres dark piceous; distal one or two antennomeres yellowish brown; antennomeres 1 and 2 nearly glabrous; antennomeres 3-11 densely setose; basal antennomere largest, about three times as long as 2 or 3, which are shortest; antennomeres 4-11 subequal in length. Labrum, tip of mandibles, and distal portion of maxillary palpi largely piceous.

Pronotum approximately half as long as wide, 0.25 times as long as elytra, 1.8 times as wide as head; shape convex, narrowing anteriorly, with slightly curved sides, with well-developed anterolateral tubercle, with basal margin slightly sinuous over scutellum; surface very finely, confluent punctate, rugulose; surface between punctures shining; color yellowish, sometimes with vaguely indicated darker maculae, three in basal half, two in anterior half. Scutellum small, triangular, piceous.

Elytra 1.4 times as long as wide, 0.8 times as long as entire body. Shape smoothly convex, without depressions. Surface somewhat shiny, faintly alutaceous upon close inspection. Punctuation extremely fine, nearly absent. Color of each elytron piceous with two large yellowish maculae, one in basal half and one in distal half, these maculae sometimes narrowly connected; basal macula somewhat oblique; margins of both maculae very irregular in shape.

Ventral surface dark brown, with abdomen slightly paler. Legs yellowish brown, with coxae dark brown, with hind femora largely darkened; hind femora much enlarged, 1.8 times as long as wide; hind tibiae broadly channeled distally, with apical spur broad, apically truncate and bifurcate; basal tarsomere of all legs very broad. Terminal ventrite of abdomen with median lobe. Aedeagus as in Figure 37.

**Description of female.** Form, size, and color similar to male, but differing as follows: length 3.1-3.2 mm; elytral pale markings either as in male, or more extensive, occupying most of disc, leaving only margins dark; hind femora either darkened as in male, or nearly entirely pale yellowish brown; basal tarsomere of all legs narrower; terminal abdominal ventrite apically rounded, without median lobe; spermatheca as in Figure 45.

**Material examined. Holotype:** "CAYMAN, Cayman Brac, north shore bluff, 24 May 2009 R. Turnbow" (male, FSCA). **Paratypes:** Cayman Islands, Cayman Brac, north shore bluff, 24-V-2009, R. Turnbow (1 male, BYUC; 1 female, RHTC); Cayman Islands, Grand Cayman, Queen Elizabeth Botanical Garden, 28-V-2009, Thomas, Turnbow and Ball, blacklight trap (1 female, FSCA).

**Plant associations.** Unknown.

**Etymology.** The species epithet of this taxon honors the grandmother of the third author.

**Comments.** The specimen from Grand Cayman is much paler than the others. Even so, we believe that it belongs to the same species. Similar variability is known in other West Indian species of *Megistops*.

### ***Omophoita albicollis* (Fabricius)**

(Figure 19)

*Chrysomela albicollis* Fabricius 1787: 76.

*Chrysomela leucopicta* Gmelin 1790: 1692.

**Diagnosis.** The greatly enlarged hind femora, together with the rather globosely swollen terminal portion of the distal tarsomere of each hind leg, distinguish the two species of this genus from other chrysomelids known to occur in the Cayman Islands. The elytra of *O. albicollis* (Fig. 19) are dark with pale maculae, and the postmedian oblique macula is longer and more slender than in maculate specimens of *O. cyanipennis* (Fig. 20). Two of the specimens examined have only faint, but still discernible, maculae and are separable from the immaculate form of *O. cyanipennis* only upon close inspection.

**Material examined.** Cayman Islands, Grand Cayman, Boatswain Point, 20-XII-1975, E. J. Gerberg (1, FSCA); Cayman Islands, Grand Cayman, East End, VIII-1964, E. J. Gerberg (1, FSCA); Cayman Islands, Grand Cayman, East End, 18-VIII-1964, E. J. Gerberg (6, FSCA); Cayman Islands, Grand Cayman, West Bay, 17-VIII-1964, E. J. Gerberg (2, BYUC; 6, FSCA).

**Extralimital distribution.** Antigua, Barbados, Hispaniola, Puerto Rico, Trinidad, and the Virgin Islands (Blake 1931).

**Plant associations.** In Puerto Rico, this species feeds on *Heliotropium indicum* L. (Boraginaceae), on *Ludwigia* (Onagraceae), and on *Clerodendron aculeatum* (L.) Schlecht., *Phyla nodiflora* (L.) Greene, and *Stachytarpheta indica* (L.) Vahl. (all Verbenaceae) (Virkki 1980).



**Comments.** Citing unpublished data from the University of Puerto Rico Agricultural Experiment Station, Virkki (1980) mentioned the occurrence of this species on Grand Cayman. Later (Virkki 1982), he cited Blackwelder's catalog, erroneously giving the date of publication as 1948, although the true date is 1946, and reported the distribution of this species to include Grand Cayman. In actuality, the Blackwelder catalog did not list *O. albicollis* from the Cayman Islands.

***Omophoita cyanipennis* (Fabricius)**

(Figure 20)

*Galleruca cyanipennis* Fabricius 1798: 97.

*Oedionychis octomaculata* Crotch 1873: 60. **NEW SYNONYMY.**

**Diagnosis.** The greatly enlarged hind femora, together with the rather globosely swollen terminal portion of the distal tarsomere of each hind leg, distinguish the two species of this genus from other chrysomelids known to occur in the Cayman Islands. The elytra of Cayman Islands specimens of *O. cyanipennis* (Fig. 20) are dark with pale maculae, and the postmedian oblique macula (when present) is shorter and less slender than in *O. albicollis* (Fig. 19). Two of the specimens examined have reduced maculation, the subscutellar spot being very small in one specimen and entirely absent in the other, and the oblique postmedian marking being entirely absent in both. Such specimens are not known to occur in *O. albicollis*, although the maculae of unusual specimens are weakly indicated but still of normal size. Outside of the Cayman Islands, some specimens of *O. cyanipennis* have entirely immaculate elytra.

**Material examined.** Cayman Islands, Grand Cayman, Arboretum, 11-V-2010, K. Palmer, on *Clerodendron*, Sample #KP59b (2, BYUC; 5, FSCA); Cayman Island, Grand Cayman, Bodden Town, Monument Rd., 18-V-2010, K. Palmer, on black mint, Sample #KP62B (4, FSCA); Cayman Islands, Grand Cayman, Botanic Garden, 3-VI-2008, M C. Thomas, beating (1, FSCA); Cayman Islands, Grand Cayman, East End, 18-VIII-1964, E. J. Gerberg (1, FSCA); Cayman Islands, Grand Cayman, Georgetown, 18-IX-1968, E. J. Gerberg (1, FSCA); Cayman Islands, Grand Cayman, Governor Gore's Pond, 28-V-2009, R. Turnbow (2, FSCA); Cayman Islands, Grand Cayman, Mastic Trailhead S., 20-V-2009, R. Turnbow (2, RHTC); Grand Cayman, Mastic Trailhead S., 27-V-2009, R. Turnbow (2, BYUC; 2, RHTC); Cayman Islands, Grand Cayman, Queen Elizabeth II Bot. Pk., 8-IV-2009, N. Hansraj, on *Coleus* sp. (3, FSCA); Cayman Islands, Grand Cayman, Queen Elizabeth II Bot. Pk., 7-XII-2009, N. Hansraj, on *Acalypha* sp. (2, FSCA); Cayman Islands, Grand Cayman, West Bay, 17-VIII-1964, E. J. Gerberg (1, BYUC; 1, FSCA).

**Extralimital distribution.** Cuba, Hispaniola, Jamaica, Puerto Rico, Virgin Islands, Central America, Mexico, and U.S.A. (Takizawa 2003; Riley et al. 2003).

**Plant associations.** This species has been recorded from a rather wide diversity of plants (Clark et al. 2004). As indicated above, Cayman Islands material has been collected from *Acalypha* (Euphorbiaceae), *Coleus* (Lamiaceae), black mint (*Mentha x piperita* L., Lamiaceae), and *Clerodendron* (*Clerodendrum*, Verbenaceae).

**Comments.** When Blake (1931) studied the taxonomy of this and similar species, she regarded *O. octomaculata* as a mere variety of *O. cyanipennis*, distinguishing the two varieties based on the presence or absence of pale elytral maculae. However, in subsequent publications, including the recent catalog of Riley et al. (2003), the two names have been treated as subspecies. Indeed, in some parts of the distribution, such as in the U.S.A., only one of the varieties occurs. In contrast, throughout much of the West Indies, the two occur together. Conceptually, the recognition of subspecies is valid. One subspecies could be characterized by populations including either both color forms together or only immaculate individuals. The other could be characterized by populations including only maculate beetles. However, this approach would not allow for the identification of many singleton specimens, and it would sometimes require very long series to properly classify material. Very likely, populations exist in which the overwhelming majority of specimens are of one color form, but with a few rare individuals being of the other. Such populations would be hard to assign to one subspecies or the other. Here, we have chosen not to

recognize subspecies, hence the synonymy proposed above. All of the specimens seen from the Cayman Islands are maculate, but two of them have a reduced number of spots.

***Syphrea thurstonae*, new species**

(Figures 21, 38, 46)

**Diagnosis.** In this species, the hind femora are greatly enlarged, there is a well-developed prebasal groove on the pronotum, and the body is strikingly bicolored, the head and prothorax being orange-brown, the elytra being dark with metallic blue or green luster. This combination of characters does not occur in any other chrysomelid known to occur in the Cayman Islands. Elsewhere in the West Indies, this species is similar in size and color to *Syphrea constanzae* (Blake), a species from Hispaniola, but the elytra of that species are much more coarsely punctate.

**Description of male.** Body oval, glabrous. Head, prothorax, and legs pale orange-brown; elytra dark brown to black with blue-green metallic luster; ventral areas of mesothorax pale orange-brown; ventral areas of metathorax and abdomen dark brown. Length 1.8 mm; width across humeri 1.0 mm.

Head pale orange-brown, similar in color to pronotum; labrum, palpi, and basal half of antennae pale orange-brown; distal half of antennae darker brown; tips of mandibles piceous. Eyes separated by about 0.6 times width of head. Vertex impunctate, polished; frontal tubercles subtriangular, shallowly delimited laterally, deeply delimited behind, deeply delimited from frontal ridge; frontal ridge distinct and narrow posteriorly, broadly expanded laterally in clypeal area.

Pronotum 1.4-1.6 times as wide as long, 1.6 times as wide as head across eyes, 0.7 times as wide as elytra across humeri; lateral margins each with well-defined bead; anterior and posterior margins without bead; antebasal groove deep, extending to posterolateral corners; disc polished, minutely punctate; color pale orange-brown. Scutellum subtriangular, brown.

Elytra together 1.4 times as long as wide at humeri, 2.8-3.1 times as long as pronotum. Punctures fine, confused, separated by a distance about twice as great as their diameters. Interpunctural areas polished. Color dark brown to black with blue-green metallic sheen.

Ventral areas of prothorax polished, of same color as dorsal areas of pronotum; prosternum between coxae about as wide as antennae; procoxal cavities broadly open behind; ventral areas of mesothorax alutaceous, pale orange-brown; metasternum dark brown without metallic luster, mesally polished and sparsely pubescent, laterally glabrous and alutaceous; metepisternum dark brown without metallic luster, glabrous, alutaceous; abdomen dark brown, alutaceous, sparsely pubescent. Legs slightly darker than prothorax; tarsal claws bluntly appendiculate. Aedeagus as in Figure 38.

**Description of female.** Characters as in male, but with spermatheca as in Figure 46.

**Material examined. Holotype:** "CAYMAN, Grand Cayman Mastic Trailhead S, bl trap 21 May 2009, Thomas, Turnbow & Ball" (male, FSCA). **Paratypes:** Cayman Islands, Cayman Brac, Bight Rd. at Major Donald Dr., Brac Parrot Preserve, 23-V-2009, M. C. Thomas (8 females, FSCA); Cayman Islands, Cayman Brac, Brac Parrot Reserve, 23-V-2009, R. Turnbow (1 female, BYUC; 1 female, RHTC); Cayman Islands, Cayman Brac, Major Donald Dr., 0.6 km E jct. Ashton Reid Dr., 6-VI-2008, M. C. Thomas, B. K. Dozier, blacklight trap (1 male, FSCA); Cayman Islands, Grand Cayman, 3 km W Colliers, 19°21'2" N, 81°07'2" W, 21-II-1993, W. E. Steiner & J. M. Swearingen, at black light in cut-over forest near ponds (2 females, USNM); Cayman Islands, Grand Cayman, Mastic Trailhead S, 21-V-2009, Thomas, Turnbow & Ball, bl trap (1 female, BYUC); Cayman Islands, Little Cayman, North Coast Rd., 26-V-2009, R. Turnbow (1 female, RHTC).

**Plant associations.** Unknown. Related species are associated with Euphorbiaceae.

**Etymology.** The species epithet of this taxon honors the mother of the second author.

**Comments.** As currently constituted, the genus *Syphrea* Baly, including the West Indian species formerly classified in *Hermaeophaga* Foudras, is a somewhat heterogeneous assemblage. The placement of

Cayman Islands material in this genus does not necessarily indicate a close relationship with the type species, *S. pretiosa* Baly. It merely reflects a close similarity to several other West Indian species that are now included in the genus.

### Subfamily Eumolpinae, Tribe Typophorini

#### *Metachroma adustum* Suffrian

(Figure 22)

*Metachroma adusta* Suffrian 1866: 339.

*Metachroma terminale* Horn 1892: 215.

**Diagnosis.** In this species, the hind femora are not greatly enlarged in comparison to those of the front and middle legs, the pronotum has well developed lateral and posterior marginal beads, and the elytral punctures are arranged in regular striae. The prothorax is dark brown, but the elytra vary from entirely light brown (unusual specimens) to entirely dark brown. In many specimens, the elytra are mostly dark, but with the apical area light. The elytra are not like *Metachroma clarkei* in having isolated dark spots or a reticulate pattern. These characters distinguish *M. adustum* from all other chrysomelid species known to occur in the Cayman Islands.

**Material examined.** Cayman Islands, Cayman Brac, West End Point, 22-V-2009, R. Turnbow (4, BYUC; 12, FSCA); Cayman Islands, Cayman Brac, West End Point, 6-VI-2008, M. C. Thomas (2, FSCA); Cayman Islands, Grand Cayman, Boatswain Point, Lime Tree Estate, 27-II-1987, E. J. Gerberg (2, FSCA); Cayman Islands, Grand Cayman, vicinity Gun Bay, 3-VI-2008, M. C. Thomas (10, FSCA); Cayman Islands, Grand Cayman, vicinity Gun Bay, 4-VI-2008, R. Turnbow, on *Conocarpus erecta* (5, BYUC; 75, RHTC); Cayman Islands, Grand Cayman, Mastic Trail, 20-V-2009, R. Turnbow (1, FSCA); Cayman Islands, Grand Cayman, Mastic Trail, 28-V-2009, R. Turnbow (1, RHTC); Cayman Islands, Grand Cayman, Mastic Trailhead S., 20-V-2009, R. Turnbow (1, BYUC); Cayman Islands, Grand Cayman, Mastic Trailhead S., 27-V-2009, R. Turnbow (1, RHTC); Cayman Islands, Grand Cayman, Meagre Bay Pond, 4-IV-1997, S. A. Wells (4, BYUC); Cayman Islands, Grand Cayman, North Side, 19°21'N, 81°12'W, 22-II-1993, W. E. Steiner & J. M. Swearingen, at black light in forest clearing near coast (2, BYUC; 7, USNM); Cayman Islands, Grand Cayman, Rum Point, 3-VI-2008, R. Turnbow (1, BYUC; 1, RHTC); Cayman Islands, Little Cayman, 2.4 km E. Blossom Village, 26-V-2009, M. C. Thomas (2, FSCA); Cayman Islands, Little Cayman, 2.4 km E. Blossom Village, 26-V-2009, R. Turnbow (1, RHTC); Cayman Islands, Little Cayman, Coot Marsh, 27-V-2009, Thomas, Turnbow & Ball, blacklight trap (2, FSCA); Cayman Islands, Little Cayman, North Coast Road, 0.1 km west Olivine Kirk Dr., 26-V-2009, Thomas, Turnbow & Ball blacklight trap (1, FSCA); Cayman Islands, Little Cayman, 0.3 km SE Spot Bay, 26-V-2009, Thomas, Turnbow & Ball, bl trap (2, FSCA); Cayman Islands, Little Cayman, 0.3 km SE Spot Bay, 27-V-2009, R. Turnbow (2, RHTC).

**Extralimital distribution.** Cuba and U.S.A. (Florida) (Takizawa 2003). We have also examined specimens from several islands in the Bahamas (BYUC, previously unpublished data).

**Plant associations.** Outside of the Cayman Islands, this species has been reported in association with *Conocarpus erectus* L. (Combretaceae), *Eucalyptus* (Myrtaceae), *Psidium guajava* L. (Myrtaceae), *Rosa* (Rosaceae), and *Citrus sinensis* (L.) Osbeck (Rutaceae) (Clark et al. 2004). As noted in the Material Examined section above, one large series from the Cayman Islands was also collected from *C. erectus*.

**Comments.** Blake (1970) reported this species from Grand Cayman. Probably based on her report, Peck (2005) also listed *M. adustum* from Grand Cayman.

#### *Metachroma clarkei* Blake

(Figures 23, 24, 39, 47)

*Metachroma clarkei* Blake 1970: 40.

**Diagnosis.** In this species, the hind femora are not greatly enlarged in comparison to those of the front and middle legs, the pronotum has well developed lateral and posterior beads, and the elytral punctures are arranged in regular striae. The pronotum is light brown with four dark spots, these sometimes coalescing to form only two spots. The elytra are usually light brown with the suture dark and also with dark discal spots. However, these spots may coalesce to form a somewhat reticulate pattern, or they may unusually be weakly indicated or absent. Unlike *M. adustum*, the elytra are never entirely dark or with only the apical area pale. These characters distinguish *M. clarkei* from all other chrysomelid species known to occur in the Cayman Islands.

**Material examined.** Cayman Islands, Cayman Brac, Songbird Drive, 6-VI-2008, M. C. Thomas (1, FSCA); Cayman Islands, Cayman Brac, West End Point, 6-VI-2008, M. C. Thomas (1, FSCA); Cayman Islands, Cayman Brac, West End Point, 6-VI-2008, R. Turnbow, on *Rhizophora mangle* L. (2, BYUC; 13, RHTC); Cayman Islands, Cayman Brac, West End Point, 7-VI-2008, M. C. Thomas (12, FSCA); Cayman Islands, Cayman Brac, West End Point, 7-VI-2008, R. Turnbow, on *Rhizophora mangle* L. (4, RHTC); Cayman Islands, Cayman Brac, West End Point, 22-V-2009, M. C. Thomas (3, BYUC; 11, FSCA); Cayman Islands, Cayman Brac, West End Point, 22-V-2009, R. Turnbow (16, RHTC); Cayman Islands, Little Cayman, Coot Marsh, 27-V-2009, Thomas, Turnbow & Ball, blacklight trap (9, FSCA); Cayman Islands, Little Cayman, Coot Marsh area, 26-V-2009, M. C. Thomas (2, FSCA); Cayman Islands, Little Cayman, Guy Banks Road, 2.4 km east of Blossom Village, 26-V-2009, M. C. Thomas (9, FSCA); Cayman Islands, Little Cayman, 2.4 km east Blossom Village, 26-V-2009, R. Turnbow (4, BYUC; 4, RHTC).

**Extralimital distribution.** Mexico and U.S.A. (Florida) (Peck and Thomas 1998).

**Plant associations.** Many of the specimens listed above were collected from *Rhizophora mangle* L. (Rhizophoraceae). In Florida, this beetle species has been reported in association with *Laguncularia racemosa* (L.) Gaertn. (Combretaceae). In Costa Rica, "*Metachroma* nr. *clarkei*" has been reported from *Avicennia germinans* (L.) L. (Avicenniaceae) and *Conocarpus erectus* L. (Combretaceae) (Flowers and Janzen 1997).

**Comments.** This beetle species is presumably native to Mexico. It is likely an accidental introduction in Florida and the Cayman Islands.

### Subfamily Cryptocephalinae, Tribe Cryptocephalini

#### *Cryptocephalus catharinae*, new species

(Figures 25, 40, 48)

**Diagnosis.** In this species, the hind femora are not greatly enlarged in comparison to those of the front and middle legs, the base of the pronotum is not margined by a distinct bead, the apical abdominal tergite is largely exposed beyond the elytral apex, and the tarsal claws are simple rather than appendiculate. This combination of characters distinguishes *Cryptocephalus* from other chrysomelid genera known to occur in the Cayman Islands. Additionally, the dorsal color is pale brown with poorly defined yellowish areas, especially along the edges of the pronotum and elytra; the punctures of the head and pronotum are rather deep, dense, and coarse; there is no oblique impression in the basolateral quadrant of the pronotum; the elytral punctures are mostly arranged in regular striae; and the body is 2.3-3.5 mm long. This combination of characters distinguishes this species from others of the genus known to occur in the Cayman Islands, as well as elsewhere in the West Indies. This species is very similar to *Cryptocephalus kirki*, but differs in the lighter coloration and in the less densely punctate head.

**Description of male.** Body elongate oval, cylindrical, glabrous, shiny; color yellow with discal areas of pronotum and elytra darker brown; striae punctation of elytra deeply impressed to apex. Length 2.3-3.1 mm; width across humeri 1.3-1.7 mm.

Head yellow with darker brown areas on occiput and in median longitudinal groove between eyes. Eyes deeply emarginate, reniform. Vertex deeply, coarsely, punctate; area immediately mesad to eyes sparsely, shallowly punctate; more mesal area between eyes, coarsely, deeply punctate; frontal area below antennae finely punctate. Antennae filiform; antennomere 2 globular, about one third as long as antennomere 1; antennomeres 3-11 slender; antennomeres 1-5 pale yellow-brown, sparsely setose; antennomeres 6-11 dark brown, densely pubescent. Labrum and palpi pale yellow brown; mandibles piceous.

Pronotum 1.5 times as wide as long, 1.7 times as wide as head across eyes, 0.7 times as wide as elytra across humeri. Anterior margin possessing fine bead; lateral margins each with strong, carinate bead; posterior margin without bead, weakly crenulate. Discal punctures coarse, larger than those on frontal area of head but smaller than those on elytra; interspaces polished. Color brown with anterior margin narrowly yellow, with lateral margins more broadly yellow, also with two vaguely paler areas near scutellum, these sometimes confluent with each other. Scutellum subtriangular, slightly elevated posteriad, yellow with margins darker.

Elytra together 0.7 times as long as wide, 1.7 times as long as pronotum. Color pale brown, with poorly delimited yellow areas along base, lateral margins, apical margins, and sometimes suture, with epipleuron and most punctures dark brown. Punctation striate, with punctures rather coarse and deeply impressed, with those within each row normally separated by a distance less than their diameters, with those in neighboring rows separated by a distance subequal to their diameters; subscutellar stria short, extending about one third length of elytron; stria 1 (first complete row) approaching suture beyond subscutellar row, uniting with stria 2 near base of apical declivity; stria 3 paralleling stria 2 and uniting with stria 8 near elytral apex; striae 3 and 4 uniting with each other on apical declivity; stria 5 uniting with stria 7 on apical declivity; stria 6 located behind humerus, poorly defined, largely confused. Interpunctural areas polished.

Ventral areas pale yellow-brown, with lateral areas of metathorax darker brown. Prothoracic hypomera polished, nearly impunctate; prosternum distinctly punctate, with punctures similar in size to those of head; anterior margin of prosternum evenly arcuate, without mesal angulation or spine; prosternum between coxae about as wide as each coxa. Mesothorax pale yellow-brown, laterally alutaceous. Metasternum shiny, deeply, coarsely, sparsely punctate; metepisterna densely pubescent. Ventral areas of abdomen alutaceous, densely punctate. Pygidium coarsely, closely punctate, with punctures somewhat smaller than those at apex of elytra. Legs pale yellow-brown; front and middle basitarsi slightly broader than those of female; tarsal claws simple. Aedeagus as in Figure 40.

**Description of female.** Form and appearance similar to male, but with differences as follow. Eyes dorsally separated by 0.45 times maximum width of head. Pronotum 1.5 times as wide as long, 1.9 times as wide as head across eyes, 0.6 times as wide as elytra across humeri. Elytra together 1.4 times as long as wide and 2.2-2.3 times as long as pronotum. Front and middle basitarsi slightly narrower than those of male. Terminal ventrite possessing deep fovea. Spermatheca as in Figure 48. Length 3.0-3.5 mm; width across humeri 1.6-1.8 mm.

**Material examined. Holotype:** "CAYMAN ISLANDS: Grand Cayman, Queen Elizabeth Botanical Garden, 28-V-2009 Thomas, Turnbow and Ball. Blacklight trap" (male, FSCA). **Paratypes:** Cayman Islands, Grand Cayman, Mastic Trail, 28-V-2009, R. Turnbow (1 female, BYUC; 3 males, 1 female, RHTC); Cayman Islands, Grand Cayman, Mastic Trailhead S, 20-V-2009, R. Turnbow (1 female, RHTC); Cayman Islands, Grand Cayman, Queen Elizabeth Botanical Garden, 28-V-2009, Thomas, Turnbow and Ball, blacklight trap (1 male, BYUC; 3 females, FSCA).

**Plant associations.** Unknown.

**Etymology.** The species epithet of this taxon honors Catharine Barbara Clark, daughter of the senior author.

**Comments.** The West Indies are especially species-rich with regards to the genus *Cryptocephalus*. Many species have already been named, and many more are yet to be described.

***Cryptocephalus irroratus* Suffrian**

(Figure 26)

*Cryptocephalus irroratus* Suffrian 1852: 32.

**Diagnosis.** This species exhibits characters of the genus *Cryptocephalus* (hind femora not greatly enlarged in comparison to those of front and middle legs, base of pronotum crenulate rather than being margined by distinct bead, apical abdominal tergite largely exposed beyond elytra, tarsal claws simple). Additionally, the punctures in the basal two-thirds of the elytra are not arranged in rows (except laterally). The elytra are yellow with brown punctures and with two irregular, brown, transverse bands in the posterior half (Fig. 26). Additional brown markings are sometimes also present. This combination of characters is not found in any other chrysomelid species known to occur in the Cayman Islands.

**Material examined.** Cayman Islands, Grand Cayman, Bodden Town, 27-II-2009, R. R. Askew (1, FSCA); Cayman Islands, Grand Cayman, Georgetown, UCCI, 19-V-2009, M. Thomas (3, FSCA); Cayman Islands, Grand Cayman, Georgetown, UCCI, 19-V-2009, R. Turnbow (1, RHTC); Cayman Islands, Grand Cayman, Georgetown, UCCI, 20-V-2009, R. Turnbow (6, RHTC); Cayman Islands, Grand Cayman, Georgetown, UCCI, 29-V-2009, Thomas, Turnbow and Ball, blacklight trap (2, FSCA); Cayman Islands, Grand Cayman, Georgetown, UCCI Campus, 2-VI-2008, M. C. Thomas, beating at night (2, BYUC; 8, FSCA); Cayman Islands, Grand Cayman, Mastic Trailhead S., 20-V-2009, R. Turnbow (2, RHTC); Cayman Islands, Grand Cayman, Mastic Trailhead S., 27-V-2009, R. Turnbow (2, BYUC; 2, RHTC); Cayman Islands, Grand Cayman, Mastic Trailhead S., 20-29 May 2009, R. Turnbow, FIT (1, BYUC); Cayman Islands, Grand Cayman, Queen Elizabeth Botanical Garden, 28-V-2009, Thomas, Turnbow and Ball, blacklight trap (1, FSCA).

**Extralimital distribution.** Central America, Mexico, and U.S.A. (Florida) (Riley et al. 2003).

**Plant associations.** Outside of the West Indies, this species has been reported from *Parthenium hystrophorus* L. (Asteraceae) and *Byrsonima lucida* (Mill.) DC. (Malpighiaceae) (Clark et al. 2004).

**Comments.** This beetle species has apparently spread recently from its native range. Prior to the report from Florida (Riley and Gilbert 2000), it was known only from Mexico and Central America.

***Cryptocephalus kirki*, new species**

(Figures 27, 41, 49)

**Diagnosis.** This species exhibits characters of the genus *Cryptocephalus* (hind femora not greatly enlarged in comparison to those of front and middle legs, base of pronotum not margined by distinct bead, apical abdominal tergite largely exposed beyond elytral apex, tarsal claws simple). Additionally, the dorsal color is almost uniformly dark brown (except in specimens from Little Cayman, in which the elytral base is narrowly pale); the punctures of the head and pronotum are rather deep, dense, and coarse; there is no oblique impression in the basolateral quadrant of the pronotum; the elytral punctures are mostly arranged in regular striae; and the body is 2.5-3.9 mm long. This combination of characters distinguishes this species from others of the genus known to occur in the Cayman Islands, as well as elsewhere in the West Indies.

**Description of male.** Body elongate oval, cylindrical, glabrous; color lustrous dark reddish brown, with pale yellow-brown head; striate punctation deeply impressed to elytral apex. Length 2.5-3.0 mm; width across humeri 1.3-1.4 mm.

Head pale yellow-brown with darker brown areas on occiput and in median longitudinal groove between eyes. Eyes deeply emarginate, dorsally separated by about 0.26 times maximum width of head; punctures of occipital area coarse, separated by a distance subequal to their diameters, easily visible although smaller than those of pronotum; area adjacent to eyes impunctate. Antennae pale yellow-brown;

antennomere 2 about as long as broad, about one third as long as antennomere 1; antennomeres 3-11 slender. Labrum and palpi pale yellow-brown; mandibles piceous.

Pronotum 1.5 times as wide as long, 1.7 times as wide as head across eyes, 0.9 times as wide as elytra across humeri; lateral and anterior margins each having well defined bead; posterior margin without bead; punctures coarse, deep, larger than those on frontal area of head but smaller than those on elytra, many of them separated by a distance less than diameter of puncture; interspaces polished; pronotal color reddish brown. Scutellum subtriangular, brown with darker margins.

Elytra together 1.2 times as long as wide, 1.9 times as long as pronotum. Punctuation striate, with punctures coarse and deeply impressed, with those within each row normally separated by a distance less than their diameters, with those in neighboring rows separated by a distance subequal to their diameters; subscutellar stria short, extending about one third length of elytron; stria 1 (first complete row) approaching suture beyond subscutellar row, uniting with stria 2 near base of apical declivity; stria 3 paralleling stria 2 and uniting with stria 4 on apical declivity; stria 5 extending to base of apical declivity; striae 6 and 7 (posthumeral striae) somewhat confused; stria 8 regular, ending on apical declivity; stria 9 regular, uniting with combined striae 1 and 2 near elytral apex; stria 10 adjacent to epipleuron, with punctures at extreme elytral apex somewhat confused; humeral area impunctate. Interpunctural areas polished. Color reddish brown, slightly paler than that of pronotum, with punctures dark brown.

Ventral areas of thorax and abdomen brown, similar in color to dorsal areas, with prosternum slightly paler and metathorax slightly darker than other ventral areas; prosternum distinctly punctate, with punctures similar in size to those of head; anterior margin of prosternum evenly arcuate, without mesal angulation or spine; prosternum between coxae about as wide as each coxa; anterolateral area of prothorax distinctly punctate; posterolateral area of prothorax impunctate, polished; metepisternum pubescent, rugosely punctulate; metasternum with lateral areas distinctly punctulate, with mesal areas largely impunctate and alutaceous; ventral areas of abdomen finely punctate and alutaceous; pygidium coarsely, closely punctate, with punctures similar in size to those at apex of elytra. Legs testaceous, with femora somewhat darkened; front and middle basitarsi slightly broader than those of female; tarsal claws simple. Aedeagus as in Figure 41.

**Description of female.** Form and appearance similar to male, but with differences as follow. Eyes dorsally separated by 0.3-0.4 times maximum width of head. Pronotum 1.5-1.6 times as wide as long, 1.7-1.8 times as wide as head across eyes, 0.9 times as wide as elytra across humeri. Elytra together 1.2-1.3 times as long as wide, 2.0-2.2 times as long as pronotum. Color of head varying from largely pale yellow brown to largely dark brown with clypeal area paler. Front and middle basitarsi slightly narrower than those of male. Last visible sternite having deep fovea. Spermatheca as in Figure 49. Length 3.3-3.9 mm; width across humeri 1.8-2.2 mm.

**Material examined. Holotype:** "CAYMAN IS: Cayman Brac, Major Donald Dr., .6 km. E jct. Ashton Reid Dr., 6-VI-2008, M. C. Thomas, R. H. Turnbow, B. K. Dozier, blacklight trap" (male, FSCA). **Paratypes:** Cayman Islands, Cayman Brac, Bight Rd., Brac Parrot Pres., 24-V-2009, Thomas, Turnbow & Ball, blacklight trap (2 males, 1 female, FSCA); Cayman Islands, Cayman Brac, Bight Rd., Brac Parrot Pres., 25-V-2009, Thomas, Turnbow & Ball, blacklight trap (1 male, 1 female, BYUC; 4 males, FSCA); Cayman Islands, Cayman Brac, Brac Parrot Reserve, 24-V-2009, R. Turnbow (1 female, RHTC); Cayman Islands, Cayman Brac, Great Cave, 22-V-2009, R. Turnbow (1 female, FSCA); Cayman Islands, Cayman Brac, jct. Hemmington Rd. at Songbird Dr., 7-VI-2008, R. Turnbow (1 male, 1 female, RHTC); Cayman Islands, Cayman Brac, Major Donald Dr., 0.4 km E jct. Ashton Reid Dr., 22-V-2009, Thomas, Turnbow & Ball, bl trap (1 female, FSCA); Cayman Islands, Cayman Brac, Major Donald Dr., 0.6 km E jct. Ashton Reid Dr., 6-VI-2008, M. C. Thomas, R. H. Turnbow, B. K. Dozier, blacklight trap (1 female, BYUC; 1 male, 1 female, FSCA); Cayman Islands, Cayman Brac, Major Donald Dr., 0.6 km E jct. Ashton Reid Dr., 7-VI-2008, R. Turnbow (1 female, RHTC); Cayman Islands, Cayman Brac, Major Donald Dr., 0.6 km E jct. Ashton Reid Dr., 8-VI-2008, M. C. Thomas, R. H. Turnbow, B. K. Dozier, blacklight trap (1 male, BYUC; 2 males, FSCA); Cayman Islands, Little Cayman, 0.3km SE Spot Bay, 26-V-2009, R. Turnbow (1 male, 1 female, RHTC).

**Plant associations.** Unknown.

**Etymology.** The species epithet of this taxon honors the father of the second author.

**Comments.** The specimens from Little Cayman are narrowly pale along the elytral base, but we believe them to be the same species as those from Cayman Brac.

***Cryptocephalus paulotigrinus*, new species**

(Figures 28, 29, 50)

**Diagnosis.** This species exhibits characters of the genus *Cryptocephalus* (hind femora not greatly enlarged in comparison to those of front and middle legs, base of pronotum not margined by distinct bead, apical abdominal tergite largely exposed beyond elytra, tarsal claws simple). Additionally, an oblique impression is present in the basolateral quadrant of the pronotum, and the elytral punctures are mostly arranged in regular striae. This combination of characters is not found in any other chrysomelid species known to occur in the Cayman Islands. The color varies dramatically. Paler specimens are dark brown with yellowish pronotal and elytral markings (Fig. 28). The pronotal color pattern is quite distinctive among West Indian species of *Cryptocephalus* (dark brown with pale anterior margin, behind this in anterior half with row of four transverse pale markings, the most lateral of these nearly attaining lateral margin, behind this in posterior half with transverse row of four pale markings, the most lateral of these nearly attaining posterolateral corners). Darker specimens are nearly uniformly dark reddish brown (Fig. 29). In some ways, these resemble *C. splendidus* Suffrian, a species from Jamaica. However, adults of that species are smaller and less elongate, and they have less deeply impressed elytral striae.

**Male.** Unknown.

**Description of female.** Body elongate oval, subcylindrical, glabrous, shiny. Color variable, in lighter specimens brown with yellow maculae on pronotum and with yellow vittae on elytra, in darker specimens nearly entirely dark brown; dark color of darker specimens more reddish than dark markings in paler specimens. Elytral punctation largely striate, deeply impressed to apex. Length 4.7-5.0 mm; width across humeri 2.6-2.9 mm.

Head variable in color; paler specimens yellow with darker brown in median longitudinal groove between eyes; head of darker specimens brown, paler than pronotum, darker than antennae, slightly darker in posterior half. Surface polished; occipital area very finely punctate, with punctures separated by a distance several times as great as their diameters; deep median longitudinal groove present between eyes; frons and clypeus elevated beyond level of neighboring areas, with punctures similar in size to those of vertex but separated on average by a distance subequal to their diameters. Eyes deeply emarginate, reniform, dorsally separated by 0.3-0.4 times width of head. Antennae filiform, pale yellow-brown, distally darker; antennomere 1 elongate, with a few scattered setae; antennomere 2 globular, about one third as long as antennomere 1, armed with several apical setae; antennomeres 3-4 slender, each with several apical setae; antennomeres 5-11 slender, densely pubescent. Labrum pale yellow-brown, alutaceous, with transverse row of setae; mandibles piceous; palpi pale yellow-brown.

Pronotum 1.5-1.8 times as wide as long, 0.9 times as wide as elytra across humeri. Anterior margin with well-developed bead; lateral margins each with strong, carinate bead; posterior margin without bead, nearly smooth, with crenulations very poorly developed. Distinct oblique lateral depression present near basal third. Discal punctures fine to moderate in size, larger than those of head, much smaller than those on elytra, mostly separated by a distance greater than their diameters; surface between punctures polished, upon close examination very finely punctulate. Color of darker specimens reddish brown, similar to or slightly paler than elytra, with base slightly darker than disc, with vaguely darker transverse line slightly behind anterior margin; color of lighter specimens dark brown, with anterior margin behind bead yellow and with eight yellow maculae, four of them transversely placed in anterior half, four of them transversely placed in posterior half, with lateral-most maculae positioned adjacent to lateral bead and sometimes narrowly connected with each other and with yellow anterior margin. Scutellum subtriangular, distinctly longer than wide, slightly elevated posteriorly, reddish brown.



Elytra together 1.3-1.8 times as long as width across humeri, 3.2-3.3 times as long as pronotum. Darker specimens dark reddish brown, marked with lighter reddish brown streaks on some interstitial areas; lighter specimens with alternating dark reddish brown and yellow stripes along striae and interstriae, with posthumeral stripes broken up into small spots. Punctuation largely striate, with striae in distal areas located in deep grooves; punctures moderately coarse, deeply impressed, those within each row normally separated by a distance less than their diameters, with some punctures nearly confluent; interstriae normally wider than striae in basal half, more distantly separated in distal half; 7 striae present at base, including subscutellar stria, additional striae present behind humerus; stria 2 regular, uniting with stria 7 near elytra apex; stria 3 regular, paralleling stria 2, uniting with stria 4 on apical declivity; stria 4 regular, but narrowly devoid of punctures near basal third; stria 5 at base regular and defining inner margin of humerus, behind humerus much confused, intermingled with stria 6, thereafter again regular and uniting with stria 6 on apical declivity; stria 7 regular; stria 8 regular, adjacent to epipleuron; epipleuron with marginal row of punctures smaller than those of elytral disc. Humeral area impunctate. Interpunctural areas polished, on close examination finely punctulate.

Ventral areas of thorax and abdomen varying in color from almost entirely dark reddish brown to largely yellow, marked with comparatively small brown areas; brown color of darkest specimens more reddish than in paler specimens; metepisterna always dark. Prothoracic hypomera polished, glabrous, nearly impunctate; prosternum impunctate, glabrous, polished; anterior margin of prosternum evenly arcuate, without mesal angulation or spine, slightly reflexed ventrally beyond level of more posterior area; prosternum between coxae about as wide as each coxa. Mesothorax laterally alutaceous, mesally polished. Metasternum mesally polished, glabrous to finely, sparsely punctate; lateral areas of metasternum alutaceous, punctate, with punctures similar in size to those of pronotum; metepisterna densely pubescent. Ventral areas of abdomen alutaceous, pubescent, finely punctate; terminal ventrite with deep fovea. Pygidium coarsely, closely punctate, with punctures coalescent, nearly as large as those at apex of elytra. Tarsal claws simple. Spermatheca as in Figure 50.

**Material examined. Holotype:** “CAYMAN: Grand Cayman, Mastic Trail, 28 May 2009, R. Turnbow” (female, FSCA). **Paratypes:** Cayman Islands, Grand Cayman, mangrove area 4 km NE Savannah, 19°18'2"N, 81°17'2"W, 20-II-1993, F. J. Burton, W. E. Steiner, J. M. Swearingen (2 females, USNM); Cayman Islands, Grand Cayman, Mastic Trail, 28-V-2009, R. Turnbow (1 female, BYUC; 1 female, RHTC).

**Plant associations.** Unknown.

**Etymology.** The species epithet of this taxon is derived from Latin and refers to the color pattern of paler specimens that somewhat resembles that of a little tiger.

**Comments.** The color variation in this species is striking, enough so to suggest that there are actually two species involved, rather than just one. However, we find no significant differences other than just color, and some specimens are quite intermediate between the two extremes. The oblique pronotal impressions are distinctive, but we don't believe this species to belong to the genus *Aulacothoracicus* Watts that is defined by even more pronounced impressions.

### ***Diachus auratus* (Fabricius)**

(Figure 30)

*Cryptocephalus auratus* Fabricius 1801b: 57.

*Eumolpus aeneus* Olivier 1808: 916.

*Cryptocephalus chalconatus* Mannerheim 1843: 312.

*Monachus viridis* Melsheimer 1847: 174.

*Diachus aeneolus* LeConte 1880: 197 [*nomen nudum*].

*Melixanthus hisamatsui* Takizawa 1975: 56.

**Diagnosis.** The subcylindrical body shape and small body size (normally less than 2 mm long) are sufficient to distinguish this species from all other chrysomelids known to occur in the Cayman Islands.

The appendiculate, rather than simple, tarsal claws further distinguish it from the genus *Cryptocephalus* that shares many of the same characteristics. The dorsal color is mostly dark brown, the pronotum being somewhat paler than the elytra and with yellowish lateral margins, and the surface is strongly alutaceous. The eyes are more than twice as long as broad. *Triachus cerinus* LeConte is a cryptocephaline chrysomelid that is widespread in the West Indies. It has not yet been found in the Cayman Islands but may eventually be discovered there. It is even smaller than *D. auratus*, the color is mostly yellow, the surface is strongly polished, and the eyes are nearly round.

**Material examined.** Cayman Islands, Grand Cayman, Georgetown, UCCI, 19-V-2009, M. Thomas (1, FSCA); Cayman Islands, Grand Cayman, Governor Gore's Pond, 28-V-2009, R. Turnbow (1, RHTC).

**Extralimital distribution.** This species is widespread throughout much of the New World, and it has spread to many localities in the Old World (Riley et al. 2003).

**Plant associations.** This species has been associated with numerous plants in diverse plant families (Clark et al. 2004).

**Comments.** As a whole, the genus *Diachus* is in need of taxonomic study. Within the genus, *D. auratus* seems to be quite distinctive, but future study may reveal that there is actually a complex with several cryptic species.

### ***Pachybrachis* species 1**

(Figure 31)

**Diagnosis.** In the Cayman Islands, this genus is distinguished from other chrysomelids by the well-formed basal bead of the pronotum, the exposed pygidium, and the front femora that are enlarged in comparison to those of the middle and hind legs. This species differs from the other Cayman Islands species of *Pachybrachis* in numerous characters, including the larger body size (3.0-4.2 mm, compared to 2.0-2.3 mm long), the eyes that are narrowly separated (by much less than the length of the basal antennomere in males, by about the length of the basal antennomere in females), and the more polished integument.

**Material examined.** Cayman Islands, Cayman Brac, Bight Rd., Brac Parrot Pres., 24-V-2009, Thomas, Turnbow & Ball, blacklight trap (5, FSCA); Cayman Islands, Cayman Brac, Bight Rd., Brac Parrot Pres., 25-V-2009, Thomas, Turnbow & Ball, blacklight trap (6, FSCA); Cayman Islands, Cayman Brac, Brac Paradise Subdivision, 22-V-2009, Thomas, Turnbow & Ball, bl trap (4, FSCA); Cayman Islands, Cayman Brac, Brac Paradise Subdivision, 6-VI-2008, M. C. Thomas, R. H. Turnbow, B. K. Dozier, blacklight trap (2, FSCA); Cayman Islands, Cayman Brac, Brac Parrot Reserve, 24-V-2009, R. Turnbow (1, RHTC); Cayman Islands, Cayman Brac, jct. Hemmington Rd. at Songbird Dr., 6-VI-2008, M. C. Thomas, R. H. Turnbow, blacklight trap (2, RHTC); Cayman Islands, Cayman Brac, jct. Hemmington Rd. at Songbird Dr., 8-VI-2008, M. C. Thomas, R. H. Turnbow, B. K. Dozier, blacklight trap (10, FSCA); Cayman Islands, Cayman Brac, Hemmington Road at Songbird Drive, 24-V-2009, Thomas, Turnbow & Ball, blacklight trap (4, BYUC; 30, FSCA); Cayman Islands, Cayman Brac, Long Beach, 23-V-2009, R. Turnbow (2, RHTC); Cayman Islands, Cayman Brac, Long Beach, 24-V-2009, M. C. Thomas (1, FSCA); Cayman Islands, Cayman Brac, Long Beach, 24-V-2009, R. Turnbow, on *Cocoloba wifera* (L.) L. (1, RHTC); Cayman Islands, Cayman Brac, Major Donald Dr., 0.4 km E. jct. Ashton Reid Dr., 23-V-2009, R. Turnbow (1, RHTC); Cayman Islands, Cayman Brac, Major Donald Dr., 0.6 km E. jct. Ashton Reid Dr., 5-VI-2008, M. C. Thomas, R. H. Turnbow, blacklight trap (1, RHTC); Cayman Islands, Cayman Brac, Major Donald Dr., 0.6 km E. jct. Ashton Reid Dr., 6-VI-2008, M. C. Thomas, R. H. Turnbow, B. K. Dozier, blacklight trap (2, FSCA); Cayman Islands, Cayman Brac, Major Donald Dr., 0.6 km E. jct. Ashton Reid Dr., 7-VI-2008, R. Turnbow (1, RHTC); Cayman Islands, Cayman Brac, Major Donald Dr., 0.6 km E. jct. Ashton Reid Dr., 8-VI-2008, M. C. Thomas, R. H. Turnbow, B. K. Dozier, blacklight trap (1, FSCA); Cayman Islands, Cayman Brac, Major Donald Dr. at Bight Rd., 22-VI-2009, R. Turnbow (1, FSCA); Cayman Islands, Grand Cayman, vicinity Gun Bay, 4-VI-2008, R. Turnbow, on *Conocarpus erecta* (1, RHTC);

Cayman Islands, Little Cayman, North Coast Road, 0.1 km west Olivine Kirk Dr., 26-V-2009, Thomas, Turnbow & Ball, blacklight trap (7, FSCA); Cayman Islands, Little Cayman, North Coast Rd., 0.1 km west jct. Olivine Kirk Rd., 27-V-2009, Thomas, Turnbow & Ball, bl trap (1, FSCA); Cayman Islands, Little Cayman, 0.3 km SE Spot Bay, 26-V-2009, Thomas, Turnbow & Ball, bl trap (2, FSCA); Cayman Islands, Little Cayman, 0.3 km SE Spot Bay, 26-V-2009, R. Turnbow (1, RHTC).

**Plant associations.** As noted above, one specimen was collected from *Conocarpus erectus* L. (Combretaceae) and another from *Cocoloba wifera* (L.) L. (Polygonaceae).

**Comments.** In the West Indies, as well as in many other areas, the genus *Pachybrachis* is in need of a great deal of taxonomic investigation. Many of the named species are inadequately described. The aedeagus, which is distinctive for many species, has never been illustrated for most of them. Beyond the named species, many others are yet to be described. Indeed, the two Cayman Islands species are very likely both unnamed endemics. However, considering the taxonomic difficulties with the genus, we have chosen not to name them at this time. *Pachybrachis* sp. 1 belongs to a group in which the integument is polished and the eyes, especially in the males, are very narrowly separated. Such species are found on many of the West Indian islands. In some ways, they resemble *Mastacanthus* Suffrian, a genus known only from Cuba. Indeed, future study may prove that they are better placed in that genus.

### ***Pachybrachis* species 2**

(Figure 32)

**Diagnosis.** In the Cayman Islands, this genus is distinguished from other chrysomelids by the well-formed basal bead of the pronotum, the exposed pygidium, and the front femora that are enlarged in comparison to those of the middle and hind legs. This species differs from the other Cayman Islands species of *Pachybrachis* in numerous characters, including the smaller body size (2.0-2.3 mm, compared to 3.0-4.2 mm long), the eyes that in either sex are separated by many times the length of the basal antennomere, and the more alutaceous integument.

**Material examined.** Cayman Islands, Grand Cayman, Bodden Town, 27-II-2009, R. R. Askew (1, FSCA); Cayman Islands, Grand Cayman, Georgetown, 20-V-2009, R. Turnbow (1, BYUC; 3, RHTC); Cayman Islands, Grand Cayman, Governor Gore's Pond, 28-V-2009, R. Turnbow (1, RHTC).

**Plant associations.** Unknown.

**Comments.** This species may well be undescribed. However, in view of problems associated with identification of the species in the genus, we have opted not to name it at this time.

### **Summary**

Twenty-nine species are treated herein, 23 of these from Grand Cayman, nine from Little Cayman, and nine from Cayman Brac (Table 1). However, the preponderance of species from Grand Cayman may in part be due to more extensive collecting on that island. We suspect that additional fieldwork will produce other species records for all three of the islands. In fact, we suspect that additional collecting will lead to the discovery of Cayman Islands species that are not treated in the paper. The known distributions for 15 of the 29 species extend to other parts of the West Indies, and the distributions of twelve include mainland North America (eleven species are apparently endemic to the Cayman Islands).

Nine of the 29 species reported herein are described as new species, and the two unidentified species of *Pachybrachis* are likely undescribed. This high percentage is not surprising, considering the small number of chrysomelid investigations that have been conducted on the islands. Prior to this treatment, only three leaf beetle species had been reported from the Cayman Islands (*Charidotella jamaicensis*, *Omophoita albicollis*, *Metachroma adustum*). Moreover, it is certainly not unexpected to find new species of *Apraea*, *Longitarsus*, *Megistops*, *Syphrea*, and *Cryptocephalus*, given what is already known about the species richness of these genera in the West Indies.

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