ANOTATED CHECKLIST OF THE COCKROACHES
OF FLORIDA (DICTYOPTERA: BLATTARIA: BLATTIDAE,
POLYPHAGIDAE, BLATTELIDAE, BLABERIDAE)

THOMAS H. ATKINSON, PHILIP G. KOHLER
Department of Entomology and Nematology,
University of Florida,
Gainesville, Florida 32611-0540

RICHARD S. PATTERSON
Insects Affecting Man and Animals Research Laboratory, USDA-ARS,
1600 SW 23rd Dr., Gainesville. Florida 32608

ABSTRACT

Synonymy, distribution, and ecological data are summarized for 38 species of cockroaches in 24 genera in 4 families which occur in Florida. We include information on other species known from nearby areas which may also be collected in the state. Thirteen of these species, including most of the important pests, have been introduced from Africa (7), the Neotropics (3), and Asia (3). Most exotic species appear to be dependent on human disturbance and only two, Pycnoscelis surinamensis (L.) and Periplaneta australasiae (F.), are commonly found in natural communities away from human disturbance. Blattella germanica (L.) and Supella longipalpa (F.), both introduced, are strictly domiciliary. Most of the native species (15) have neotropical distributions and are not found north of Florida. Four species, Chorisononeura texensis Saussure & Zehntner, Euathlus oblongus gemma (Hebard), Eurygaster floridana (Walker), and Ischnothele deropeltiformis (Brunner), are restricted to the southeastern U.S. and are the northernmost representatives of neotropical genera. Five species of Parabolatta, distributed widely in the Southeast, reach their southern limits in Florida. There is one endemic species, Arenivaga floridensis Caudell, restricted to sandy areas of central Florida.

Resumen

Se resume sinonimia, distribución, y datos ecológicos para 38 especies de cucarachas en 24 géneros en 4 familias que ocurren en la Florida. Incluimos información sobre otras especies conocidas de áreas cercanas las cuales pueden colectarse en el estado. Trece de éstas, incluyendo la mayor parte de las plagas importantes, se han introducido de Africa (7), del Neotrópico (3), y de Asia (3). La mayoría de las especies exóticas parecen depender del disturbio humano y solo dos, Pycnoscelis surinamensis (L.) y Periplaneta australasiae (F.), se encuentran comúnmente en comunidades naturales lejos de disturbio humano. Blattella germanica (L.) y Supella longipalpa (F.), ambas introducidas, son estrictamente domiciliarias. La mayoría de las especies nativas (15) tienen distribuciones neotropicales y no se encuentran al norte de Florida. Cuatro especies, Chorisononeura texensis Saussure & Zehntner, Euathlus oblongus gemma (Hebard), Eurygaster floridana (Walker), y Ischnothele deropeltiformis (Brunner), se limitan al suroeste de los EE. UU., y son las representantes más septentrionales de géneros neotropicales. Cinco especies de Parabolatta, distribuidas ampliamente en el suroeste, alcanzan sus límites australes en Florida. Hay una especie endémica, Arenivaga floridensis Caudell, restringida a áreas arenosas de la Florida central.

The Asian cockroach, Blattella asiatica Mizukubo (Koth 1986), is probably the most recent addition to the rich cockroach fauna of Florida. Unlike its close relative, the
German cockroach, *B. germanica* (L.), the Asian cockroach is essentially an outdoor species, only entering homes occasionally (Brenner et al. 1988). We began reviewing the literature on species already present in the state, both native and introduced, for purposes of identification of this new exotic and similar species and as preparation for studies on its potential interactions with other outdoor species. We were struck by the general paucity of up-to-date information on the cockroach fauna, exclusive of the well-documented domestic and peridomestic pest species.

The most recent comprehensive taxonomic treatment of the cockroaches of the continental United States was that of Hebard (1917) and included 46 species from the U.S. More recent general works include keys by Blatchley (1920) and Helfer (1963) and a list of names by Pratt (1988) which added virtually no new biological or distributitional information. Pratt (1988) included 66 species for the U.S. Some of this increase was due to introduction and establishment of exotic species. More thorough collection in southern Florida and the Southwest also resulted in descriptions of new species and detection of other species which were previously known from neighboring areas and probably do not represent introductions.

This checklist was prepared to summarize synonymy, distributions, and ecology of all species of cockroaches known from Florida and adjacent areas. We were particularly interested in analyzing and comparing distribution and ecology of native and introduced species, with emphasis on their pest status.

**METHODS**

The majority of the information presented here is summarized from an exhaustive literature review. Specimens deposited in the Florida State Collection of Arthropods were studied by the senior author for additional distributitional information. We have also included information from an unpublished inventory of the entomofauna of the Archbold Biological Station, Lake Placid, Highlands Co. (M. A. Deyrup, personal communication). The bulk of the available information on distributions in Florida is based on collections made prior to 1920 by Hebard, Rehn, Davis, and Blatchley (Blatchley 1920, Davis 1914, 1915, Hebard 1916, Rehn & Hebard 1904, 1905, 1907, 1910, 1914a,b). Subsequent information has been scattered among ecological studies (e.g. Friauf 1953, Peck & Beninger 1989) or miscellaneous taxonomic notes.

Hebard's (1917) monograph was taken as our starting point and no attempt was made to review prior literature. Previous publications, including those of Hebard himself, contained many misidentifications and other incorrect usage of names. Synonymies and overall distributions were summarized from Princie's treatment of the Blattaria in the Orthopterorum Catalogus (1962, 1963, 1964, 1965, 1966, 1967, 1969, 1971). These were modified by more recent treatments when applicable.

The order of superfamilies and families follows McKittrick (1964), and differs considerably from that used by Princie. Species are listed alphabetically within genera, and genera alphabetically within families.

We include complete synonymy for each species. Genera in which a given species name has been published are included in parentheses if these combinations have not been used in the North American literature. Novel combinations or important misidentifications in North American usage are indicated. The nomenclatorial usage of important taxonomic and general references is indicated but our listings are not exhaustive in this regard. We have listed in the synonymy all references in the North American literature since 1917 that deal with taxonomy, identification and description of life stages, and ecology, particularly with reference to outdoor habitats and distribution with respect to structures. Not all of these are cited in the text of the article, but the full bibliographic citations are included among the references cited as an aid to readers.
All common names which have been used in the literature are listed also. Most were invented by Blatchley (1920), Helfer (1963), or Pratt (1988) and do not reflect common use. Common names that are on the approved list of the Entomological Society of America (Werner 1982) are indicated with an asterisk. The name “palmettobug” is indiscriminately used for any large cockroach, principally species of Periplaneta and Eurytus (Gurney & Walker 1976).

Distributional information includes a summary of worldwide distribution, list of states and provinces in the U.S. and Canada, and counties in Florida. We have used numbered superscripts in the distribution lists to indicate literature citations to save space and to reduce distraction. An asterisk indicates a previously unreported locality. Biological and ecological information is summarized where available with emphasis on relative abundance in and about structures, disturbed areas, and natural habitats. Biological information on the important domestic and peridomestic pest species is covered more adequately in references such as Cornwell (1968) and is not repeated.

RESULTS

Four additional species have been reported from Florida that were not on Pratt’s list (1988): Blaberus dicoiodalai Serville (Roth 1969), Myrmecoblatta wheeleri Hebard (Deyrup & Fisk 1984), Neoblatella detesra (Walker) (Peck & Beninger 1989), and Symplectes morsue (Peck & Beninger 1989). Chorisoneura parisc Renn, apparently established in Miami, is reported from Florida and the U.S. for the first time here. Pratt (1988) and Princis (1969) listed Euthlastoblatz diapana (F.) for the southeastern U.S., but it does not occur in the U.S. They apparently overlooked Hebard’s comments (1971) on misidentifications of E. gemma Hebard under this name. Taking these additions and deletions into account, there are at least 69 species of cockroaches in 31 genera in 5 families known from the continental U.S.

Cockroaches generally are associated with litter and decaying wood in forest ecosystems. They reach their greatest taxonomic diversity in the humid tropics and subtropics (Schal et al. 1994). Not surprisingly, Florida, with its mild humid climate and variety of subtropical and temperate forest ecosystems has the richest cockroach fauna of any part of the U.S. Currently 38 of the 69 species known from the U.S. are found in Florida. Thirteen of these have been introduced. More native and introduced species likely would be detected with more field work by knowledgeable collectors.

Distributions of the 25 native species known from Florida are summarized in Table 1. A very strong tropical bias is immediately evident. Most of the genera (15 of 7) are neotropical and 15 of the 25 species are found in the Caribbean and/or Mosoamericas, reaching their northern limits in Florida. Several of these neotropical species are known only from the Keys and have been considered by previous authors to be introduced (e.g., Hebard 1917:260 re Blaberus craniifer Burmeister, Phoetilia pallida (Brunner), Holcopompa nitidula (F.)). In the absence of any convincing evidence to the contrary (e.g., Panchlora nivea (L.)), we take the conservative approach of treating most of these as natives (i.e., not introduced by man).

Chorisoneura texensis Saussure & Zehntner, Euthlastoblatz gemma (Hebard), Eurytus floridana (Walker), and Ischnoptera deropeltiformis (Brunner), are restricted to the southeastern U.S., but are the northernmost representatives of neotropical genera.

Five species of Paroblatta, a neartic genus, reach their southernmost limits in Florida, only 1 of which is found in southern Florida. Two other species of Paroblatta, P. bolitana (Saussure & Zehntner) and P. penicillana (DeGeer), are known from adjoining counties in southern Georgia and probably occur in northern Florida.
TABLE 1. SUMMARY OF DISTRIBUTIONAL PATTERNS OF NATIVE COCKROACHES IN FLORIDA AND ADJACENT AREAS. GENUS DISTR., AREA WITH GREATEST NUMBER OF SPECIES; FL, TOTAL SPECIES IN FLORIDA; SFL, CFL, NFL, SOUTHERN, CENTRAL, AND NORTHERN FLORIDA; NTRP, NEOTROPICS; GC, GULF COAST; EUS, TEMPERATE EASTERN U.S.

<table>
<thead>
<tr>
<th>Family</th>
<th>Genus</th>
<th>Genus dist.</th>
<th>FL</th>
<th>SFL</th>
<th>CFL</th>
<th>NFL</th>
<th>NTRP</th>
<th>GC</th>
<th>EUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blattidae</td>
<td>Eurycotsis</td>
<td>Neotropical</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Polyphagidae</td>
<td>Areivagia</td>
<td>SW Nearctic</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Compsodes</td>
<td>Neotropical</td>
<td>2</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Holocampa</td>
<td>Neotropical</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Myrmecoblatta</td>
<td>Neotropical</td>
<td>1</td>
<td>?</td>
<td>1</td>
<td>-</td>
<td>?</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Blattellidae</td>
<td>Cariblatta</td>
<td>Neotropical</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
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<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Esthiasobolatta</td>
<td>Neotropical</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Ischnocera</td>
<td>Neotropical</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Latiblatta</td>
<td>Neotropical</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Neoblatta</td>
<td>Neotropical</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Panorhalla</td>
<td>Nearctic</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>5</td>
<td>5</td>
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</tr>
<tr>
<td></td>
<td>Plectoptera</td>
<td>Neotropical</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Symphylus</td>
<td>Neotrop/Afr.</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Blaberidae</td>
<td>Blaberus</td>
<td>Neotropical</td>
<td>2</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Hemiblaberus</td>
<td>Neotropical</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Phoetalia</td>
<td>Neotropical</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Totals      | 25                 | 19           | 10 | 11  | 15  | 10  | 8    |

The only endemic cockroach species known from Florida, Areivagia floridensis Caudill, is restricted to sandy areas of central Florida and is the only eastern representative of the genus. The remaining species of Areivagia are known from temperate desert and semiarid areas of southwestern North America (Hebard 1920).

The only native species which might be considered a pest is the Florida woods roach or palmetto bug, Eurycotsis floridana, which breeds around houses in shaded, moist environments, and occasionally enters buildings. All our major pest species are exotics.

Information on the 13 introduced species is summarized in Table 2. Most species originated in Africa (7), followed by Asia (3) and the Neotropics (3). Infestations of Nauphoeta cinerea Olivier were reported from feed mills in the Tampa area in the early 1950's (Gresham 1952). Since that time there have been no further notices of its activities or indication that it has spread, suggesting that the infestation did not persist. The only species which have successfully invaded naturally occurring communities in the state are the Australian cockroach, Periplaneta australasiae, and the Surinam cockroach, Pyuncinus surinamensis (L.). The Cuban cockroach, Panchloras nivea (L.), is common in wooded lots within the urbanized area of Gainesville, FL, and may also be established in similar forested areas further removed from human activity. Most of the other species appear to depend on human disturbance to persist, with the possible exception of some of other species of Periplaneta (e.g., fuliginosa). Blattella germanica (L.) and Supella longipalpa (F.) represent the extreme of dependency and could be considered obligate domiciliary species in Florida. While individuals of these species may be found out of doors, breeding populations either do not occur or do not persist.
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**TABLE 2. SUMMARY OF ECOLOGY AND DISTRIBUTIONS OF COCKROACHES INTRODUCED INTO FLORIDA. D, BREEDS INSIDE STRUCTURES; P, COMMONLY BREEDS AROUND STRUCTURES, URBANIZED AREAS; N, COMMONLY FOUND IN NATURAL COMMUNITIES.**

<table>
<thead>
<tr>
<th>Family/Species</th>
<th>D</th>
<th>P</th>
<th>N</th>
<th>Origin</th>
<th>Distribution in U.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blattidae</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Periplaneta</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>Africa</td>
<td>throughout U.S. as urban-domiciliary, outdoors in Southeast</td>
</tr>
<tr>
<td>americana</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Florida, further north as domestil.-urb.</td>
</tr>
<tr>
<td>P. australasia</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>Africa</td>
<td>outdoors in central &amp; southern Florida.</td>
</tr>
<tr>
<td>P. brunnea</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>Africa</td>
<td>southeastern U.S. to southern Fla.</td>
</tr>
<tr>
<td>Blattellidae</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. germanica</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>Asia</td>
<td>entire U.S., obligate domiciliary</td>
</tr>
<tr>
<td>Chorionera pariisi</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>Caribbean</td>
<td>southern Fla.</td>
</tr>
<tr>
<td>Supella longipalpa</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>Africa</td>
<td>entire U.S., obligate domiciliary</td>
</tr>
<tr>
<td>Symphoce pallens</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>Africa</td>
<td>Key West</td>
</tr>
<tr>
<td>Blaberidae</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Epilampra maya</td>
<td>?</td>
<td>-</td>
<td>?</td>
<td>Mesoamerica</td>
<td>Arcadia</td>
</tr>
<tr>
<td>Nausphaena cinerea</td>
<td>+</td>
<td>?</td>
<td>-</td>
<td>Africa</td>
<td>Tampa</td>
</tr>
<tr>
<td>Panchlora nivea</td>
<td>-</td>
<td>+</td>
<td>?</td>
<td>Neotropics</td>
<td>peninsular Fla., Gulf Coast</td>
</tr>
<tr>
<td>Pycnoscelis</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>trop. Asia</td>
<td>outdoors in Fla., Gulf Coast, further north in greenhouses, etc.</td>
</tr>
<tr>
<td>surinamensis</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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**Annotated Checklist of the Cockroaches of Florida**

Blattidae

1. *Blatta orientalis* L.
   
   Oriental cockroach

*Blatta orientalis* Linnaeus 1758:424 Syst. Nat., X ed.; Hebard 1917:173 (tax, fig);
Blatchley 1929:94 (tax, fig); Hebard 1943:271 (tax); Rehn 1945:286 (diporal); Froeschner 1954:180 (tax); Helfer 1963:50 (key, fig); Princis 1965:475 (tax); Cornwell 1968 (biol, ecol, econ status); Dakin & Hays 1970:12 (tax); Pratt 1983:88 (tax). *(Kukeriluc, Periplaneta, Stylopyga).*

*Blatta secunda* Schaeffer 1769:155 Icons Ins. circa Ratisbonam indigen.

*Blatta tertia* Schaeffer 1769:155 Icons Ins. circa Ratisbonam indigen.


*Blatta ferrarigenea* Thunberg 1810:187 Vetenskapsakad. nya Handl.

*Blatta europaena* 1846:30 Saros magye helyirata.


*Kakerlac pallipes* Philippi 1863:222 Z. Ges. Naturwiss. *(Periplaneta, Stylopyga).*

*Kakerlac platygetetha* Philippi 1863:222 Z. ges. Naturwiss. *(Periplaneta).*


**DISTRIBUTION:** Cosmopolitan in temperate areas. AL, AZ, CA, CO, CT, IA, IL, IN, KS, MI, MN, MO, NC, NE, NJ, NM, PA, TN, TX, WI.
Blatchley (1920) reported this species from Florida (Miami and West Palm Beach), however these records are undoubtedly based on adventive collections because there is no evidence that breeding populations *B. orientalis* occur anywhere in Florida or on the Southeastern Coastal Plain. We are aware of unconfirmed anecdotal reports of this species in the Jacksonville area, but have seen no specimens. Given its abundance and pest status in cooler parts of the U.S., it is likely to be introduced periodically and specimens may be found occasionally.

**ECOLOGY:** This species occurs commonly in and about houses and other structures over most of the temperate U.S. It apparently does not occur in natural communities away from human disturbance in the parts of the country where it is found.

### 2. *Eurytis floridana* (Walker)

*Florida cockroach, Florida woods roach, palmetto bug*


**DISTRIBUTION:** Peninsular Florida, lower Gulf and Atlantic coasts: AL<sup>5</sup>, FL<sup>12,11</sup>, GA<sup>22</sup>, MS<sup>22</sup>. In Florida: Alachua<sup>11</sup>, Clay<sup>22</sup>, Dade<sup>12</sup>, Duval<sup>12</sup>, Escambia<sup>22</sup>, Levy<sup>22</sup>, Highlands (M.A. Deyrup pers. comm. 1989), Hillsborough<sup>22</sup>, Polk<sup>22</sup>, Putnam<sup>22</sup>, Charlotte<sup>22</sup>, Citrus<sup>22</sup>, Collier<sup>22</sup>, Broward<sup>22</sup>, Dade<sup>22</sup>, Monroe<sup>22,26</sup>.  

**ECOLOGY:** Common in native vegetation as well as near human habitation, this species will enter houses occasionally, but does not commonly breed indoors. This species releases an oily, irritating liquid with a strong odor when disturbed and is sometimes referred to as the “stinking cockroach” or “Florida stinkbug” (Blatchley 1920, Gurney & Walker 1976). Breeding has been detected in attics (R. J. Brenner, pers. comm.). It is found in many native communities throughout Florida (Peck & Beninger 1989, Friaufl 1963).

### 3. *Eurytis lisa* Rehn

*Hustler cockroach*


**DISTRIBUTION:** Jamaica<sup>22</sup>. Florida: Monroe (Key West)<sup>22</sup>. Gurney (1959) considered this to be an introduced species, but it is also present in the West Indies and its “immigrant” status is questioned.

### 4. *Periplaneta americana* (L.)

*American cockroach*

*Periplaneta americana*: Hebaid 1917:176 (tax, fig); Blatchley 1920:99 (tax, fig); Hebaid 1949:269 (tax); Rohr 1945:269 (dispersarial); Friaufl 1953:122 (ecol); Froceehner 1954:181 (tax); Helfer 1963:51 (key, fig); Princis 1965:405 (tax); Cornwell 1968 (gen info, biol, econ status); Dakin & Hays 1970:12 (tax), Powell & Robinson 1980:216 (1st instar*
nymp); Hagenbuch et al. 1988:378 (ecol); Brenner 1988:583 (ecol); Pratt 1988:883 (checklist).

*B. sicifolia* Stoll 1813:5 Repres. exact. coloree nature d. Spectres . . .
*B. heros* Eschscholtz 1822:83 Entomographica Erste Lief.


**Distribution:** Cosmopolitan, northwards to New York City in eastern U.S.: AL**, AZ**, CA**, FL**, GA**, IA**, IL**, LA**, ME**, MI**, MS**, NC**, NY**, PA**, TX**. In Florida: Alachua**, Highlands (M.A. Deyrup pers. comm. 1989); Polk**, Monroe (incl. Keys)**, Putnam**. This species is probably found in all Florida counties and all of the U.S. states. It is generally considered to be widely distributed and we have no reason to doubt this. Nonetheless it is curious that there is relatively little documentation of its current distribution in the U.S. In the southern part of its range this species may breed outdoors.

**Ecology:** In an ecological study in northeastern Florida this species was found only around buildings, not in native habitats (Friauf 1953). A similar situation occurs at the Archbold Biological Station in sandhill communities in central Florida (M.A. Deyrup pers. comm. 1989). It is a common peridomestic species in northern Florida (Hagenbuch et al. 1988).

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5. *Periplaneta australasiae* (F.)

Australian cockroach

*P. australasiae* Fabricius 1775:217 Syst. Entomol.

*Periplaneta australasiae*: Hubard 1917:155 (tax, fig); Blatchley 1920:101 (tax, fig); Rehn 1945:269 (dispersal); Friauf 1953:122 (ecol); Froeschner 1954:182 (tax); Helfer 1963:51 (key, fig); Prince 1965:447 (tax); Lawson 1967:269 (ecol, dist); Cornwell 1968 (gen info, biol, ecom status); Powell & Robinson 1980:222 (1st instar nymph); Hagenbuch et al. 1988:378 (ecol); Pratt 1988:883 (checklist); Patterson & Koehler 1969:39 (ecol, cont).


*P. australasiae*: Stoll 1813:5 Represent. exact. coloree d'apres des Spectres . . .


**Ecology:** In an ecological study in northeastern Florida this species was found only around buildings, not in native habitats (Friauf 1953). At the Archbold Biological Station in sandhill communities in central Florida this species is found in and near buildings and is also common in native vegetation (M.A. Deyrup pers. comm. 1989). It is a common peridomestic species in north-central Florida (Hagenbuch et al. 1988) and occurs in treeholes, palm trees, and voids in block walls used in landscaping (R. J. Brenner, pers. comm.).
6. Periplaneta brunnea Burmeister
brown cockroach

*Periplaneta brunnea* Burmeister 1838:503 Handbuch Entomol.; Hebard 1917:182 (tax, fig); Blatchley 1920:101 (tax); Hebard 1943:270 (tax); Rehn 1945:270 (dispersal); Friau.f 1953:122 (ecol); Edmunds 1957:283 (bion); Helfer 1963:52 (key, fig); Princis 1965:438 (tax); Cornwell 1968 (gen info, bion, econ status); Dakin & Hays 1970:13 (tax); Powell & Robinson 1980:223 (1st instar nymph); Hagenbuch et al. 1988:378 (ecol); Brenner 1988:533 (ecol); Pratt 1988:383 (checklist); Patterson & Koehler 1989:39 (ecol, cont).


*Periplaneta fuliginosa* of Caudell, Rehn, and Hebard prior to 1917 (fide Hebard 1917).


**ECOLOGY:** In an ecological study in northeastern Florida this species was found only around buildings, not in native habitats (Friau.f 1953). It is a common peridomestic species in north-central Florida and is sometimes found in palms, treeholes, and attics (Hagenbuch et al. 1988, R. J. Brenner, pers. comm.).

**COMMENTS:** According to Hebard (1917) many earlier references to this species actually were due to misidentification of *P. fuliginosa*.

7. *Periplaneta fuliginosa* (Serville)
smokybrown cockroach*, palmetto bug


*Periplaneta fuliginosa*: Hebard 1917:188 (tax, fig); Blatchley 1920:103 (tax); Hebard 1943:270 (tax); Froeschner 1954:182 (tax); Helfer (1963:50 (key, fig); Princis 1965:442 (tax); Cornwell 1968 (gen info, bion, econ status); Dakin & Hays 1970:13 (tax); Powell & Robinson 1980:225 (1st instar nymph); Appel & Rust 1987:175 (bibliography); Hagenbuch et al. 1988:277 (ecol); Brenner 1988a:533 (ecol); Brenner 1988b:33 (ecol); Pratt 1988:383 (checklist); Patterson & Koehler 1989:39 (ecol, cont); Brenner 1990 (ecol).


*Periplaneta brunnea* of Rehn & Hebard prior to 1917 (fide Hebard 1917).

*Periplaneta truncata* of Caudell, Rehn & Hebard prior to 1917 (fide Hebard 1917).

**DISTRIBUTION:** Eastern Asia; Found outdoors in southeastern states from Texas to north Florida: AL, FL, GA, LA, MS, TX. Florida: Duval, Leon, Nassau, Walton. No specimens have been reported from central and southern Florida where it is replaced ecologically by *P. australasiae*. In other parts of the U.S. this species is sometimes found in greenhouses or inside buildings.

**ECOLOGY:** Common outdoors near houses (Blatchley 1920). Found in greenhouses in Iowa (Froeschner 1954). It was the most common peridomestic species found around houses in north-central Florida, particularly in treeholes and attics (Hagenbuch et al. 1988, Brenner 1988a,b, 1990).

**COMMENTS:** According to Hebard (1917) most earlier records of *P. brunnea* actually refer to this species.
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Polyphagidae

8. *Arenivaga floridensis* Caudell
Florida sand cockroach


**DISTRIBUTION:** Central Florida: Alachua*, Highlands* (M. A. Deyrup pers. comm. 1989), Lake*, Levy*, Marion*, Polk', Pinellas', Putnam*, Volusia*. This is an isolated eastern species of a genus that otherwise occurs in the deserts and drylands of the southwestern U.S. and Mexico (Hebard 1920).

**ECOLOGY:** Friauf (1953) found this species occasionally in longleaf pine flatwoods in an ecological study of native vegetation in northern Florida. It is found in native vegetation at the Archbold Biological Station in central Florida, an area dominated by sandhill communities (M. A. Deyrup pers. comm. 1989). It has been reported from burrows of the oldfield mouse, *Peromyscus polionotus rhoadsi* (Banks) in sandhill areas of the Ocala National Forest (Young 1949).

9. *Compsodes cucullatus* (Saussure & Zehntner)
hooded cockroach


**DISTRIBUTION:** Guatemala*, Panama*, FL: Dade', Highlands Co. (M. A. Deyrup pers. comm. 1989 data); Indian River*.

**ECOLOGY:** This species has been found in native habitats in central Florida (M. A. Deyrup pers. comm. 1989) and pinelands in southern Florida (Blatchley 1920).

10. *Compsodes schwarzi* (Caudell)
Schwarzh's hooded cockroach


**DISTRIBUTION:** Baja California*, Southwestern U.S.: AZ*, Southeastern U.S.: FL*, TX*. In Florida: Dade*.

**ECOLOGY:** Peck & Beninger (1989) reported a single specimen from open pine lands in Everglades National Park in a flight-intercept trap.

11. *Holocompsa nitidula* (F.)
small hairy cockroach


**DISTRIBUTION:** Hebard 1917:206 (tax, fig); Blatchley 1920:107 (tax); Gurney 1942:55, Helfer 1963:55 (key, fig male, female); Princis 1963:93 (tax); Pratt 1988:883 (checklist).

*Corydalia collaris* Burmeister 1838:491 Handb. Entomol. (*Blatta*).

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DISTRIBUTION: American tropics, Cuba¹ [Key West²].

ECOLOGY: Collected inside structures in Key West (Hebard 1917).

12. Myrmeoblatta wheeleri Hebard


**DISTRIBUTION:** Costa Rica¹, Guatemala¹, Florida: Highlands². Deyrup & Fisk (1984) consider this species to be a native, previously undetected because of its cryptic habits, rather than an introduced species.

**ECOLOGY:** In Florida it is associated with nests of carpenter ants, *Camponotus abdominalis floridanus* (Buckley), and with other ant species in Central America (Deyrup & Fisk 1984).

Blattellidae

13. Blattella asahinai Mizukubo


**Blattella beydenkoi** Roth 1986:28 (desc, key, fig); Roth 1986:371 (tax).

**DISTRIBUTION:** India², Southeastern Asia³, recently introduced into Florida, Florida: Collier, Lee (Brenner 1990), Hillsborough², Marion, Manatee (Brenner 1990), Pinellas², Polk².

**ECOLOGY:** Found outdoors in shaded areas with abundant litter. Attracted to lights and flies actively (Brenner et al. 1988).

14. Blattella germanica (L.)

*German cockroach*


**Blattella germanica:** Hebard 1917:57 (tax, fig); Blatchley 1920:73 (tax, fig); Hebard 1943:262 (tax); Rehn 1945:268 (dispersal); Friauf 1953:122 (ecol); Froeschner 1954:178 (tax); Helfer 1963:47 (fig, ootheca); Cornwell 1968 (gen info, biol, econ status); Princis 1969:807 (tax); Dakin & Hays 1970:14 (tax); Roth 1985:14 (tax, key, fig; Carlson & Brenner 1988:711 (tax)); Pratt 1988:883 (checklist).


*Blatta dawrica* Laxmann 1769:48 Sibirische Briefe.

*Blatta flavescens* Duc'hoz 1771:174 Aldrovandus Lotharingiae. (Kakerlac).


*Blatta obtiquata* Daldorf 1793:94 Skiirviter Naturhist.-Selskabet.


*Phyllodromia niitakura* Shiraki 1931 Ins. Matsumurana.


**DISTRIBUTION:** Cosmopolitan. Found in and around human habitations throughout the world, originally from eastern Asia (Roth 1985).

**ECOLOGY:** In an ecological study in northeastern Florida this species was found inside
and around buildings, not in native habitats (Friauf 1953). A similar situation occurs at the Archbold Biological Station in central Florida (M. A. Deyrup pers. comm. 1989). Based on our experience this species is an obligate domiciliary species in the U.S.

15. *Cariblatta lutea lutea* (Saussure & Zehntner)

*small yellow cockroach*


**Distribution:** Cuba	extsuperscript{a}, Southeastern U.S.: AL	extsuperscript{a,b}, FL	extsuperscript{a,b}, GA	extsuperscript{a}, LA	extsuperscript{a}, MS	extsuperscript{a,b}, NC	extsuperscript{a,b}, SC	extsuperscript{a,b}, TN	extsuperscript{a}. In Florida: Alachua	extsuperscript{a}, Brevard	extsuperscript{a}, Duval	extsuperscript{a}, Franklin	extsuperscript{a}, Glades	extsuperscript{a,b}, Hendry	extsuperscript{a}, Highlands (M. A. Deyrup pers. comm. 1989), Hillsborough	extsuperscript{a}, Pinellas	extsuperscript{a}, Polk	extsuperscript{a}, St. Johns	extsuperscript{a,b}, Sarasota	extsuperscript{a}, Seminole	extsuperscript{a}, Volusia	extsuperscript{a}.

**Ecology:** This species is found commonly in a variety of natural plant communities in Florida (Blatchley 1920, Friauf 1953, Dakin & Hays 1970). It also has been found near houses and disturbed areas (Lawson 1967, Hagenbuch et al. 1988). Hubbard & Goff (1939) found immatures in burrows of pocket gophers, *Geomys* sp.

16. *Cariblatta lutea minima* Hebard

*least yellow cockroach*


**Distribution:** Cuba	extsuperscript{a}, Florida: Collier	extsuperscript{a}, Dade	extsuperscript{a}, Glades	extsuperscript{a,b}, Hillsborough (R. J. Brenner, pers. comm.), Lee	extsuperscript{a}, Monroe	extsuperscript{a}, Palm Beach	extsuperscript{a}, Pinellas	extsuperscript{a}, Putnam	extsuperscript{a}, Sarasota	extsuperscript{a}.

**Ecology:** This species was collected in hardwood hammocks in southern peninsular Florida and the upper and lower Keys, and in open pinelands in Dade Co. (Peck & Beninger 1989). Friauf (1953) found this species commonly in a variety of scrub, flatwoods, and hammock communities in northeastern Florida. It was the only species found in *Spartina* marshes and sawgrass marshes where it was frequent. Blatchley (1920) collected this species in grasses behind the beach at Cape Sable (Monroe Co.).

**Comments:** Hebard (1917) proposed the name *Cariblatta lutea minima* for smaller, shorter-winged individuals. The broad overlap of this and *C. lutea lutea* though most of peninsular Florida and habitat differences observed by Friauf (1953) suggest that it may merit recognition as a separate species.

17. *Chorisoneura parishii* Rehn


**Distribution:** Panama, Colombia, Venezuela, Guyana, Surinam, French Guiana, Brazil	extsuperscript{a}. Florida: Dade Co.*. Two specimens are in the FSCA from Miami, with the following collection data: 6-VII-53, O. D. Link, sweeping; International Airport sewage plant, light trap, 24-X-61. Specimens were identified by A. B. Gurney, but apparently these records were never published. The localities and widely separated collection dates suggest that this species was introduced and is established in Miami.
18. *Chorismeura texensis* Saussure & Zehntner
small Texas cockroach

*Chorismeura texensis* Saussure & Zehntner 1893:80 Biol. Cent.-Amor., Orthoptera;
Hebard 1917:247 (tax, fig); Blatchley 1920:111 (tax, fig); Hebard 1943:260 (tax);
Friauf 1953:122 (ecol); Helfer 1963:58 (key, fig); Princis 1965:384 (tax); Dakin & Hays


**DISTRIBUTION:** Southeastern U.S.: AL10, FL11, GA12, MS13, NC14, SC15, TX16. In
Florida: Duval17, Highlands (M.A. Deyrup pers. comm. 1989), Lake1, Monroe (incl.
Keys)12, Orange13, Pinellas1, Polk14, Putnam6, Seminole1, Volusia1.

**ECOLOGY:** This species was collected in tropical hardwood hammocks in Dade Co. (Peck
& Beninger 1989). Friauf (1953) found this species occasionally in xeric hammocks in
northeastern Florida. It is also found in native sandhill vegetation in central Florida

**Euthlastoblatta diaphana** (F.)

Hebard (1917) noted that previous records of *Ceratinoptera diaphana* (referred to
genus *Aglaopteryx*) from the United States were based on misidentifications and actually
referred to a distinct species, *A. gemma*, which he described in the same publication.
Princis (1969) and Pratt (1988) failed to note this distinction and erroneously listed
this species from the U.S. *Euthlastoblatta diaphana* is known from Cuba, Hispaniola,

19. *Euthlastoblatta gemma* (Hebard)
shortwing gem cockroach

*Aglaopteryx gemma* Hebard 1917:30 Mem. Amer. Entomol. Soc. (tax, fig); Blatchley
1920:68 (tax, fig male); Hebard 1943:261 (tax); Friauf 1953:122 (ecol); Helfer 1963:37
(key, fig adult); Princis 1969:757 (tax); Dakin & Hays 1970:43 (tax); Gorham et al.
1971:133 (ecol, cont.).

**Euthlastoblatta gemma:** Princis 1969:757 Orth. Cat., Pratt 1988:888 (checklist); Peck &
Beninger 1989:615 (ecol).

*Ceratinoptera diaphana* (not *diaphana* F.): of Rehn & Hebard, Davis prior to 1917 (*fide*
Hebard 1917).

**DISTRIBUTION:** Bahamas10; Southeastern U.S.: AL10, FL11, GA12, LA13, MS13, TX13. In
Florida: Alachua1, Dade17, Duval17, Escambia12, Gadsden15, Highlands (M. A. Deyrup

**ECOLOGY:** This species is found in a wide variety of native habitats throughout its
Deyrup pers. comm. 1989). Gorham et al. (1971) reported infestations of this species
around houses in southern Georgia, but apparently no indoor breeding was involved.

**COMMENTS:** According to Hebard (1917) previous records of this species from the U.S.
consistently had been misidentified as *Ceratinoptera diaphana* (especially Rehn &
Hebard 1914a,b; Davis 1914, 1915).

20. *Ischnoptera deropeltiformis* (Brunner)
dark wood cockroach


*Ischnoptera deropeltiformis*: Hebard 1943:262 (tax); Friauf 1953:122 (ecol); Froeschner
1964:173 (tax); Helfer 1963:38 (key, fig male, female); Lawson 1967:269 (ecol); Princis
1969:747 (tax); Dakin & Hays 1970:15 (tax); Gorton 1980:21 (ecol); Pratt 1988:884
(checklist); Peck & Beninger 1989:615 (ecol).
Ischnoptera intrica tuberculosis Blatchley 1903:186 Orthoereta of Indiana.
Ecology: This species has been reported from tropical hardwood hammocks in Dade Co., and the upper and lower Keys and pinelands in Dade Co. (Peck & Beninger 1989). Friis (1963) found this species very commonly in a wide variety of scrub, flatwoods, and hammock communities in northeastern Florida. Gorton (1980) observed this species frequently in shrub and grassland communities in Kansas.

21. Latiblattella rehni Hebard
Rehn's cockroach

Ecology: This species is found in native habitats (Blatchley 1920, M. A. Deyrup pers. comm. 1989). It has also been found in attics in north-central Florida (R. J. Brenner pers. comm.).
Comments: Before Hebard described this species (1917) it was widely misidentified under the names listed above.

22. Neoblatella detersa (Walker)

Distribution: Haiti12, Jamaica12, Florida16; Monroe16.
Ecology: Peck & Beninger (1989) collected this species in tropical hardwood hammocks of Dade Co and the upper and lower Keys and in open pinelands in Dade Co.
Comments: Previous reports of this species prior to Peck & Beninger (1989) were based on misidentifications of Latiblattella rehni Hebard.

23. Parcoblatta boliviana (Saussure & Zehntner)
Boll's wood cockroach

Kakerlaut schaeffleri Rehn 1904:72 Psyche. (Loboptera).
Parcoblatta boliviana: Hebard 1917:77 (tax, fig); Blatchley 1920:80 (tax); Hebard
1943:263 (tax); Froeschner 1954:175 (tax); Helfer 1963:40 (key, fig); Lawson 1967:267 (ecol); Princis 1969:715 (tax); Dakin & Hays 1970 (tax); Gorton 1980:21 (ecol); Pratt 1988:884 (checklist).

**Distribution:** AL12, GA12, IA12, IL12, KS12,18, LA12, MO12, NC12, NE12, OK12, SC12, TX12. This species is likely to occur in northern Florida because it has been reported from Brunswick, Georgia (Hebard 1917).

**Ecology:** In Alabama it is found in wooded areas, associated with leaf litter and loose bark (Dakin & Hays 1970). In Kansas it has been reported from grasslands (Lawson 1967) and shrub communities (Gorton 1980). According to Lawson (1967), young nymphs are consistently associated with nests of ants of the genus *Crematogaster.*

**24. Parcoblatta divisa** (Saussure & Zehntner)

southern wood cockroach


**Parcoblatta divisa:** Hebard 1917:133 (key, fig); Hebard 1943:267 (tax); Helfer 1963:42 (tax); Lawson 1967:265 (ecol); Princis 1969:723 (tax); Dakin & Hays 1970:17 (tax); Pratt 1988:884 (checklist).

**Parcoblatta pensylvanica divisa:** Blatchley 1920:88 (tax, fig).


**Distribution:** AL12, AR16,18, DE12, FL12, GA12, KS12, LA12, MD12, MS12, NC12, NJ12, OK16,18, PA12, TN16,18, TX14, VA12, WI12. In Florida: Alachua14, Jefferson18, Liberty14.

**Ecology:** It has been collected in dry pine forests, oak scrub and moist hammocks in northern Florida and in deep cool ravines along the Apalachicola River (Hebard 1943). In Kansas this species overwinters as nymphs; it is found on borders of woodlands, pastures, sometimes invading houses built in wooded areas (Lawson 1967).

**Comments:** According to Hebard (1943), a pale phase of this species has been collected in Alachua Co. which is different from the usual coloration.

**25. Parcoblatta fulvescens** (Saussure & Zehntner)

fulvous wood cockroach


**Parcoblatta fulvescens:** Hebard 1917:114 (tax, fig); Blatchley 1920:83 (tax, fig); Hubbard & Goff 1939:154 (ecol); Hebard 1943:265 (tax); Friauf 1953:122 (ecol); Froeschner 1954:176 (tax); Helfer 1963:43 (key, fig); Lawson 1967:265 (ecol); Princis 1969:721 (tax); Dakin & Hays 1970:16 (tax); Pratt 1988:884 (checklist); Peck & Beninger 1989:615 (ecol).

**Temnopteryx texensis** Saussure & Zehntner 1898:52 Biol. Cent.-Amer., Orthoptera. (Ceratinoptera).


**Distribution:** Eastern U.S.: AL12, AR12, DC12, FL12,18, GA12, IA12, IL12, IN12, KS12, MD12, MS12, MO12, NC12, NJ12, NY12, SC12, VA12, TX12,14. In Florida: Alachua14, Broward18, Charlotte12, Dade12, Duval12, Highlands (M. A. Deyrup pers. comm., 1999), Hillsborough12, Lake12, Lee12, Monroe12, Pinellas12, Polk12, Putnam12, St. Johns12, Sarasota12, Seminole12, Suwannee12, Volusia12.
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ECOLOGY: This species has been reported from pinelands of Dade Co., and tropical hardwood hammocks of the upper and lower Keys (Peck & Bentinger 1989). Friauf (1953) found this species only in hammock communities in an ecological study in northeastern Florida (Putnam Co.). It was more abundant in xeric communities than in mesic or hydric communities. Hubbard & Goff (1939) found females and immatures in burrows of pocket gophers, Geomys spp.

26. Parcoblatta lata (Brunner)

broad wood cockroach


Parcoblatta lata: Hebard 1917:128 (tax, fig); Blatchley 1920:84 (tax) Hebard 1943:266 (tax); Friesen 1954:176 (tax); Friauf 1953:212 (fig male, female); Lawson 1967:256 (ecol); Helfer 1963:44 (key, fig male, female); Princis 1969:722 (tax); Dakin & Hays 1970 (tax); Gorton 1990:21 (ecol); Pratt 1988:884 (checklist).


Ischnoptera couloniana (not couloniana Saussur and Zehntner): Rehn & Hebard 1910:433 (fide Hebard 1917).


ECOLOGY: Friauf (1953) found this species rarely in low lying mesic hammocks in northeastern Florida. Dakin & Hays (1970) considered this the most common species of the genus in Alabama. Hebard (1943) considered it abundant in pinelands of the southeastern coastal plain. Gorton (1980) reported it from grassland and shrub communities in Kansas.

27. Parcoblatta pennsylvanica (DeGeer)

Pennsylvania wood cockroach


Parcoblatta pennsylvanica: Hebard 1917:139 (tax, fig); Blatchley 1920:86 (tax, fig); Rau 1940:4 (biol); Hebard 1943:268 (tax); Friesen 1954:177 (tax); Helfer 1963:42 (key); Lawson 1967:256 (ecol); Cornwell 1968:58 (gen info, biol, econ status); Princis 1969:724 (tax); Dakin & Hays 1970:17 (tax); Gorton 1980:21 (ecol); Pratt 1988:884 (checklist).


DISTRIBUTION: Southeastern Canada: ON, QC, Eastern U.S.: AL, DC, GA, IL, IN, KS, LA, MA, ME, MD, MI, MN, MO, MS, NC, NE, NJ, NY, OH, PA, SD, TN, TX, WI. This species probably occurs in Florida because it has been collected near Thomasville, Georgia (Hebard 1917).
ECOLOGY: Froeschner (1954) considered this to be the commonest native cockroach in Iowa. In Kansas, it is found in open timbered areas with little ground cover (Lawson 1967) and forest, shrub and grassland communities (Gorton 1980).

28. Parcoblatta uhleriana (Saussure)
   Uhler's wood cockroach

*Parcoblatta uhleriana* Hebard 1917:105 (tax, fig); Blatchley 1920:81 (tax, fig); Froeschner 1954:176 (tax); Princis 1969:718 (tax); Dakin & Hays 1970:16 (tax); Gorton 1980:21 (ecol); Pratt 1988:884 (checklist).


**DISTRIBUTION:** Eastern U.S.: AL12, CT12, DC12, DE12, FL12, GA12, IA12, IL12, IN12, KS12, MA12, MD12, MI12, MO12, MS12, NC12, NJ12, NY12, PA12, TN12, VA12. In Florida: Duval12.

**ECOLOGY:** Reported from forested areas in Kansas (Lawson 1967, Gorton 1980).

29. Parcoblatta virginica (Brunner)
   Virginia wood cockroach

*Temnoptera virginica* Brunner 1865:56 Nouv. Syst. Blatt. (*Ischnoptera*).

*Parcoblatta virginica* Hebard 1917:96 (tax, fig); Blatchley 1920:82 (tax, fig); Hebard 1943:265 (tax); Friauf 1953:122 (ecol); Froeschner 1954:176 (tax); Helfer 1968:41 (key, fig); Lawson 1967:289 (ecol); Princis 1969:718 (tax); Dakin & Hays 1970:15 (tax); Gorton 1980:21 (ecol); Pratt 1988:884 (checklist).


*Parcoblatta uhleriana* (not *uhleriana* Saussure) Blatchley 1902 (fide Blatchley 1920:83).

**DISTRIBUTION:** Eastern U.S.: AL12, CT12, FL12, GA12, IA12, IN12, WI12, IL12, KS12, KY12, MA12, MD12, ME12, MI12, MO12, MN12, NC12, NE12, NJ12, NY12, OK12, PA12, SD12, TX12, VA12, VT12. In Florida: Nassau12, Putnam1. Hebard (1917) listed Fernandina (Nassau Co.) as a locality but suggested that it might represent an error in labelling. Dakin & Hays (1970) found this species in southern Alabama, including the Mobile area. Its presence in Florida was confirmed by Friauf (1953).

**ECOLOGY:** Friauf (1953) found this species infrequently in scrub habitats in northeastern Florida. Lawson (1967) and Gorton (1980) reported it from woodlands in Kansas, while Froeschner (1954) reported it from woodland borders in Iowa.

30. Plectoptera picta Saussure & Zehntner
   pictured beetle cockroach


**DISTRIBUTION:** Mexico, Costa Rica. U.S.: LA12, NC12, TX12, VA12. Nickle & Gurney (1985) confirmed the presence of this species in the southeastern U.S. They suggested that it might be an uncommonly collected native species or an introduced species, favoring the latter conjecture. In either event the species should eventually be found in Florida because it is also found in Mexico and Central America.
31. *Plectoptera poeyi* (Saussure)

Florida beetle cockroach


*Plectoptera poeyi*: Helfer 1963:58 (key, fig); Princis 1965:364 (tax); Pratt 1988:884 (checklist); Peck & Beninger 1989:616 (ecol).


**DISTRIBUTION:** Florida: Monroe (Keys)21-23, Cuba21.

**ECOLOGY:** This species has been collected in tropical hardwood hammocks of the lower Keys (Peck & Beninger 1989). It has been observed in hollow mangrove twigs on several occasions in the Keys (M. A. Deyrup pers. comm. 1989).

32. *Supella longipalpa* (F.)

brownbanded cockroach*

*Blatta longipalpa* Fabricius 1798:185 Suppl. Entomol. Syst.

*Supella longipalpa*: Princis 1969:917 (tax); Gurney 1970:752 (tax); Pratt 1988:884 (checklist).

*Blatta supellectilium* Serville 1839:114 Nat. Hist. Ins., Orth. (*Phyllodromia*).

*Supella supellectilium*: Hebard 1917:47 (tax, fig); Blatchley 1920:70 (tax); Hebard 1943:261 (tax); Rehn 1945:271 (dispersal); Foreschner 1954:179 (tax); Helfer 1963:46 (key, fig male, female); Cornwall 1968 (gen info, biol, econ status); Dakin & Ilays 1970 (tax).

*Blatta cubensis* Saussure 1862:165 Rev. Mag. Zool. (*Phyllodromia*).


**DISTRIBUTION:** Tropical regions of the world. All states of the U.S. except Vermont (Cornwell 1968).

**ECOLOGY:** In an ecological study in northeastern Florida this species was found only around buildings, not in native habitats (Friauf 1953). This species appears to be an obligate domiciliary in the U.S.

33. *Symphoe morsei* Hebard


**DISTRIBUTION:** Bahamas, Haiti29, Florida: Monroe29. Peck & Beninger (1989) reported this species from the U.S. for the first time.

**ECOLOGY:** This species was found in tropical hardwood hammocks on the upper and lower keys (Peck & Beninger 1989).

34. *Symphoe pallens* (Stephens)

smooth cockroach

Sympleco pallens: Roth 1985:214 (tax); Pratt 1988:884 (checklist).
Phylodromia hospes Perkins 1899:5 Fauna Hawaii (Sympleco).
Sympleco lita Hebard 1916:15, Hebard 1917:151 (tax); Blatchley 1920:90 (tax); Helfer 1963:48 (key, fig); Roth 1984:51 (tax, fig).
Sympleco vicentina Princis 1959:260 Eos.
DISTRIBUTION: Circumtropical, originally from Africa (Roth 1984). Florida: Key West\textsuperscript{14}.

Blaberidae

35. Blaberus craniifer Burmeister

death's head cockroach

Blaberus craniifer Burmeister 1838:516 Handb. Entomol.; Hebard 1917:201 (tax, fig); Blatchley 1920:16 (tax); Helfer 1963:32 (key, fig); Dakin & Hays 1970:17 (tax); Princis 1963:126 (tax); Pratt 1988:884 (checklist).
DISTRIBUTION: Dominican Republic\textsuperscript{25}, Cuba\textsuperscript{25}, Yucatan\textsuperscript{25}, Belize\textsuperscript{25}. Florida: Monroe (Key West)\textsuperscript{14}. Recorded in central Alabama as an adventive (Dakin & Hays 1970).
ECOLOGY: Hebard (1917) treated this species as introduced into the Florida Keys, stating that it “has become firmly established at Key West.” Since it is widely distributed throughout Central America and the Antilles (including Cuba), there is no way to tell whether it was introduced into the Keys via human transport or whether it occurred there naturally (presumably having dispersed there unaided at some time in the recent or distant past). For the present we are treating this species as native. It was collected by Rehn & Hebard (1914a) in wood piles, refuse, and around buildings. No information is available on its present or past occurrence in natural communities in the Keys.

36. Blaberus discoidalis Serville

DISTRIBUTION: Costa Rica\textsuperscript{26}, Nicaragua\textsuperscript{26}, Panama\textsuperscript{26}, Colombia\textsuperscript{26}, Venezuela\textsuperscript{26}, Ecuador\textsuperscript{26}, Trinida\textsuperscript{26}, Vieques Island\textsuperscript{26}, Dominican Republic\textsuperscript{26}, Haiti\textsuperscript{26}, Jamaica\textsuperscript{26}, Cuba\textsuperscript{26}, Florida: Broward (J. R. Mangold pers. comm. 1990), Dade*, Monroe*, Roth (1969:248) cited specimens of B. discoidalis from Key West in a footnote to a table on distributions
of species in a study of male genitalia in the genus Blaberus. This obscure reference was overlooked by Pratt (1988). There are many specimens in the FSCA collected between 1960 and 1970 from Key West, Stock Island, and Coral Gables. It is commonly found in crawl spaces under houses in Dade and Broward counties (J. R. Mangold pers. comm. 1990). We have no basis for judging whether it is native to southern Florida and previously has been overlooked, or whether it is a recent arrival via natural dispersal or inadvertent introduction.

ECOLOGY: Specimens in the FSCA were collected under bark of a dead tree and under a board on the ground. The pest status of this species is unknown, but is apparently slight to none since such a large species (> 5 cm) would surely attract notice if it were common near residences.

37. Epilampra maya Rehn
Maya cockroach


DISTRIBUTION: Mexico², Guatemala³, Honduras², Nicaragua², Costa Rica², Panama². FL: Reported from Arcadia (Doroto Co.) by Nickle & Sibson (1984), where it was apparently well established.

ECOLOGY: Nickle & Sibson (1984) reported this species from in and around houses in Arcadia. It was also abundant near a small stream close to an infested house. Epilampra maya has been reported from aquatic and other moist habitats in Central America.

COMMENTS: Rehn & Hebard (1927) and Princeis (1967) treated E. maya as a synonym of E. abdomen-nigrum. Roth & Gurney (1969) presented biological evidence for recognizing these as distinct species.

38. Hemiblabera tenebricosa Rehn & Hebard
broad Keys cockroach

Hemiblabera tenebricosa Rehn & Hebard 1927:247 (tax); Caudell 1931:204 (occurrence in Fla); Gurney 1953:46 (tax); Gurney 1959:78 (dist); Princeis 1963:138 (tax); Helfer 1963:52 (key, fig); Pratt 1988:884 (checklist).

DISTRIBUTION: Bahama²⁴, Haiti²⁴. FL: Monroe (Keye²); Dade (Elliot Key²⁴). This species has not been collected from the Florida mainland.

ECOLOGY: Specimens in the FSCA were collected under boards.

39. Nauphoeta cinerea (Olivier)
cinerous cockroach*, lobster cockroach


Nauphoeta cinerea: Rehn & Hebard 1927:234 (tax); Rehn 1945:274 (dispersal); Gresham 1952:77 (introd. Florida); Gurney 1953:46 (tax); Helfer 1963:54 (key, fig); Princeis 1963:289 (tax); Cornwell 1968 (gen info, biol, econ status); Pratt 1988:884 (checklist).

Blatta maderae (not maderae Fabricius 1781) Herbst 1786:170 Arch. Insectengesch.

Blatta gallica Fabricius 1793:8 Entomol. Syst.
Blatta elegans Eschschoitz 1822:84 Entomographien.
Nauphoeta grisea Burmeister 1838:508 Handb. Entomol.
Nauphoeta bivittata Burmeister 1838:508 Handb. Entomol.

DISTRIBUTION: Circumtropical, including Cuba, Hispaniola, and Mexico. It is probably
of African origin (Rehn 1945). Florida: Hillsborough (Gresham 1952). This species be-
came established in the Tampa area and was reported to breed in feed mills. There have
been no further records or reports of this species since then, suggesting that the intro-
duction may not have persisted.

ECOLOGY: In tropical areas this species is found commonly in and around structures
(Cornwell 1968).

40. Panchlora nivea (L.)
Cuban cockroach*

Panchlora nivea: Gurney 1955:285 (tax); Princis 1964:180 (tax); Helfer 1963:53 (key,
fig); Pratt 1988:884 (checklist).
Blatta chlorotica Pallas 1772:10 Spicilega Zool.
(Panchlora).
Panchlora cubensis Saussure 1862:730 Rev. Mag. Zool.; Hebard 1917:161 (tax, fig);
Blatchley 1920:106 (tax); Hefberg 1943:272 (tax); Froehhner 1954:184 (tax).
Panchlora ezoleti Smith 1900:151 Ins. New Jersey.
Panchlora fraterna Kirby 1908:195 Zoologist.

DISTRIBUTION: Greater Antilles, Mexico, Central Americaa, U.S.: FL, I.A, TX. In
comm. 1990), Marion*, Pinellas (J. R. Mangold pers. comm. 1990), Polk, St. Lucie (J.
R. Mangold pers. comm. 1990). Hebard (1917) and Blatchley (1920) stated that this
species was not found in Florida, although specimens were intercepted in ports with
some frequency. It was presumably introduced into Florida because it seems unlikely
that a green cockroach that is attracted to lights would have been overlooked by earlier
collectors, but we have been unable to locate any documentation of when this occurred.
As late as the seventies (Helfer 1963, Gurney 1955, Gurney & Roth 1972) this species
was considered to occur only in southern Texas in the U.S. Specimens from Florida in
the FSCA date from 1940 (Polk Co.). It is presently abundant throughout Florida and
along the Gulf Coast in Louisiana and adjacent parts of Texas.

ECOLOGY: This species is common around houses and in wooded areas within the city
of Gainesville in moist, shaded areas with abundant leaf litter (Hagenbueh et al. 1988).
We do not have any information regarding its occurrence in relatively undisturbed
areas, but its habits suggest that it may occur in some natural communities, such as
mesic hammocks.
41. Phoetalia pallida (Brunner)

pallid cockroach

Luerolestes pallidus: Hebard 1917:161 (tax, fig); Blatchley 1920:93 (tax); Rehn 1945:275 (dispersal); Helfer 1963:39 (key, fig).
DISTRIBUTION: Circumtropical. Florida: Monroe (Keys)\(^1\). Rehn (1945) suggested that this species is native to the West Indies, including the Greater Antilles. Its occurrence in the Keys may be natural.
ECOLOGY: This species may be found in and around structures (Blatchley 1920, Rehn 1945).

42. Pycnoscelis surinamensis (L.)

Surinam cockroach*

Pycnoscelis surinamensis: Hebard 1917:193 (tax, fig); Blatchley 1920:104 (tax, fig);
Hebard 1943:271 (tax); Rehn 1945:271 (dispersal); Friauf 1953:122 (ecol); Froeschner 1954:183 (tax, fig); Helfer 1963:54 (key, fig); Princis 1964:263 (tax); Roth 1967:774 (tax); Lawson 1967:269 (ecol); Cornwell 1968 (gen info, biol, econ status); Dakin & Hays 1970 (tax); Kevan 1980:77 (tax); Hagenbuch et al. 1988:378 (ecol); Brenner 1988:583 (ecol); Pratt 1988:884 (checklist); Peck & Beninger 1989:613 (ecol).
DISTRIBUTION: Circumtropical, Lower southeastern U.S.: AL\(^5\), FL\(^11\), LA\(^12\), TX\(^12\,13\).
In Florida: Alachua\(^12\,13\), Charlotte\(^12\), Dade\(^12\), Duval\(^12\), Highlands (M. A. Deyrup pers. comm. 1990), Hillsborough\(^13\), Monroe (incl. Keys)\(^10\,26\), Pinellas\(^1\), Putnam\(^1\), St. Johns\(^1\), Sarasota\(^1\), Volusia\(^1\). Rehn (1945) stated that this species is native to the Indo-Malayan region and has subsequently been transported around the world.
ECOLOGY: This is one of the few exotic cockroach species in Florida that has become well established in natural communities as well as in highly disturbed areas. It was commonly found in tropical hammocks of southern Dade County and the lower Keys, and open pine-lands in Dade Co. (Peck & Beninger 1989). Friauf (1963) found this species occasionally in xeric and mesic hammocks in an ecological study in northeastern Florida (Putnam Co.). It is common around houses in north-central Florida (Hagenbuch et al. 1988). All populations in North America are completely parthenogenetic with only females known. Bisexual populations occur in southeastern Asia, the native range of this species (Roth 1907).
43. Rhyparobia maderae (F.)
Madeira cockroach*

Leucophaea maderae: Hebaid 1917:268 (tax); Rehn & Hebaid 1927:242 (tax); Rehn 1945:272 (dispersal); Gurney 1953:40 (intro. U.S., desc. fig); Helfer 1963:53 (tax, key); Princis 1965:298 (tax); Cornwell 1968 (gen info, biol, econ status).
Blatta tuberculata Thunberg 1810:187 Vetenskapskad. nya Handl.
Blatta maderensis Jones 1859:110 Natural. in Bermuda.
Distribution: Old World tropics, introduced and widely distributed in Caribbean area (Rehn 1945). It was introduced into New York City, apparently from Puerto Rico (Gurney 1953). Since the initial report of its introduction, there have been no new reports of this species in the U.S., leading us to wonder if the infestation in New York persists. Such a large species (almost 5 cm long) should have attracted considerable attention, especially if it were spreading.
Although there have been no records of this species in Florida, its presence on nearby islands (Cuba and the Bahamas) and its probable pest status make it a potential threat.
Ecology: This species is found in and around structures in the Antilles where it is considered a pest (Rehn 1945).

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