September 2003

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Thomas, Michael C., "A revision of *Pediacus* Shuckard (Coleoptera: Cucujidae) for America north of Mexico, with notes on other species" (2003). *Insecta Mundi*. 47.

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A revision of *Pediacus* Shuckard (Coleoptera: Cucujidae) for America north of Mexico, with notes on other species

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Abstract. The genus *Pediacus* Shuckard is revised for America north of Mexico. Seven species are recorded: *P. andrewsi* Thomas, n. sp.; *P. fuscus* Erichson; *P. gracilis* Thomas, n. sp.; *P. hesperoglaber* Thomas, n. sp.; *P. ommatodon* Thomas, n. sp.; *P. stephani* Thomas, n. sp.; and *P. subglaber* LeConte, new status. The species are described and illustrated, and a key is presented for their identification. The described European and Neotropical species are reviewed and illustrated.

Introduction

The last paper to treat the North American Cucujidae (*sens. str.*) as a whole was Casey (1884). In that work, two species (*P. fuscus* Erichson and *P. depressus* Herbst, both described from Europe) were treated as valid and three (*P. planus* (LeConte), *P. subglaber* LeConte and *P. subcarinatus* Mannerheim) were treated as synonyms of the European species. The recent receipt of a small collection of California *Pediacus* prompted a reassessment of specimens on hand, the results of which led to this study.

Members of the different species are quite similar and external differences are generally small and subtle. The male genitalia are quite useful in separating the species. In only one species pair are the genitalic differences subtle but even there they are easily seen. Illustrations are provided of all structures useful in separating the species, as well as illustrations and discussions of the known European and Mexican-Guatemalan species. Only the seven species found in America north of Mexico, however, are included in the key. Considering the number of previously undescribed species in western North America, it is likely that more are awaiting discovery in both the Old and New Worlds.

Measurements are as follows: Head width across eyes; pronotal width at widest point; elytral width at widest point, usually at about apical third; head length at midline from basal transverse impression to anterior margin of clypeus; pronotal length at midline from base to apex; elytral length at suture from anterior edge of scutellum to tip of elytra. The ocular index was derived by dividing the head width into the closest distance between the eyes. Five specimens of each species were measured.

Label data for types are reproduced verbatim, except that old determination labels are omitted. All types of the new species described here bear a type label applied by me; these data are not reproduced for each specimen. Label data for paratypes are in the Appendix; label data for specimens examined of described species are not listed in detail here but are available from the author. Habitus photographs were produced with an Auto-Montage Pro© system; SEM photographs were taken on a JEOL JSM-5510LV Scanning Electron Microscope. Genitalia photographs were taken with a Nikon CoolPix 995 digital camera attached to a Zeiss Photo-Microscope III.

Collection codens used are from Arnett, et al. 1993:

- BMNH The Natural History Museum, London
- CDAE California Department of Food and Agriculture, Sacramento
- CMNC Canadian Museum of Nature, Ottawa
- CNCI Canadian National Collection of Insects, Ottawa
- EMEC Essig Museum of Entomology, Berkeley
- FMNH Field Museum of Natural History, Chicago
- FSCA Florida State Collection of Arthropods, Gainesville
- LACM Los Angeles County Museum, Los Angeles
- MCZC Museum of Comparative Zoology, Cambridge
- MTEC Montana State University Entomology Collection, Bozeman
- MZHF Finnish Museum of Natural History, Helsinki
- PPCD West Virginia Department of Agriculture, Charleston
- SBMN Santa Barbara Museum of Natural History, Santa Barbara
- USNM National Museum of Natural History, Washington
**Pediacus Shuckard**

*Pediacus* Shuckard 1839: 150, 185

**Type species.** *Cucujus dermestoides* Fabricius 1792: 96, by monotypy.

**Diagnosis.** Members of this genus are easily distinguished from those of *Cucujus*, the only other cucujid genus occurring in America north of Mexico, by their small size, somber coloration, and small to absent temples. They somewhat resemble various tenebrionoid beetles, but can be distinguished easily by their 5-5-4 tarsal formula in males only, and exposed pro- and mesotrochanters (Figs. 23-24).

**Description:** With characters of Cucujidae (Thomas 2002) plus: Form elongate, parallel-sided; dorsal pubescence inconspicuous to conspicuous; body small, length 2.7-7.0mm (2.7-4.5mm in North American species).

Head triangular, abruptly constricted behind eyes, with a deep, transverse post-ocular groove; epistome carinate laterally, carinae anteriorly produced so that epistome appears to be laterally toothed (Fig. 26), frons with short longitudinal grooves (Fig. 26); eyes moderate to large, hemispherical to somewhat flattened, with or without well-developed temples, with interfacetal setae (Fig. 25); antennae relatively short, nearly moniliform; antennomere VII typically larger and differently shaped than VI or VIII, sometimes markedly so; IX-XI forming a conspicuous club. Pronotum quadrate to transverse, with or without paired discal impressions; moderately to strongly explanate laterally, usually with four well-marked marginal denticles including posterior angle; anterior angle obtuse, produced. Scutellum transverse. Elytra parallel-sided, weakly to moderately costate sublaterally, abruptly declivous to explanate margin; sutural groove present; punctuation confused. Intercoxal process of prosternum narrower than a coxal cavity, rounded apically. Structure of male genitalia characteristic (Figs. 14-22, 44-47): The aedeagus is composed of a short, variously sclerotized median lobe, from the posterior edge of which two long, angled struts arise medially, extend posteriorly for about 3x the length of the median lobe and join medially to form an inverted u-shaped median strut. The internal sac contains a relatively short flagellum and often a complex armature. The tegmen consists of a long, sclerotized basal piece, articulated parameres, and paired struts that arise at the posterolateral angles of the basal piece and form an inverted v-shaped dorsal piece. Diagnostic characters are found in the shape of the parameres, shape and sclerotizations of the median lobe, and structure of the armature of the internal sac.

The male genitalia of *Pediacus* and *Cucujus* are similar, but differ in the longer, more heavily sclerotized flagellum in the latter and a relatively longer, solid median strut. The genitalia in both are dorsoventrally oriented in the abdomen, while the genitalia in the Neotropical *Palaestes* and the Australian *Platisus* lie on their side in the abdomen.

**Biology.** Label data suggest that these are predominantly found under the bark of dead conifers.

**Discussion.** Shuckard (1839) described *Pediacus* first in a key to genera on p. 150, then provided a detailed description starting on p. 185.

Including the species described here, there are 22 extant described species of *Pediacus*, 11 of which are found in the New World. One species, *P. fuscus*, is found in both the New World and the Old World. America north of Mexico has seven species, all of which occur in the United States; six are recorded here from Canada. The species seem to be restricted either to high altitudes or high latitudes.

Scudder (1900) described the fossil *Pediacus periclitans* from Florissant, Colorado. From the illustration provided it is impossible to determine the accuracy of its generic assignment with any kind of confidence.

**Pediacus fuscus** Erichson

Figs. 1, 7, 16, 31

*Pediacus fuscus* Erichson 1845: 313

*Pediacus subcarinatus* Mannerheim 1852: 363

*Silvanus planus* LeConte 1850: 223

*Pediacus planus*, Leconte 1854: 73

**Type Material:** *Pediacus fuscus*: Type not examined.

*Pediacus planus*: LeConte (1850) did not state the number of specimens that were before him when he described this species; he reported only one length measurement, suggesting he saw only one specimen, which is in the FMNH, with the following data: “[grey disk]”/ “Type 6783”/ “Pediacus planus LeC.”. There are three other specimens of this species in the FMNH with LeConte’s grey disks, with one bearing the label “*P. fuscus*. Cas.”. Whether these specimens are part
of the type series is unknown. The specimen bearing the type label is here designated as the lectotype.

Pediacus subcarinatus: Mannerheim (1852) also did not state the number of specimens before him and recorded only one length measurement. In the MZHF is a specimen labelled: “[green paper rectangle]”/“Amer. Bor.”/“Kaknu”/“Frankenh.”/“Pediacus subcarinatus Mannerh.”/“Coll. Mannerh.”/“Mus. Zool. H:fors Spec. typ. No. 2414 Pediacus subcarinatus Mannerh.”. There are three additional specimens, labelled: “Kenai”/“Holmberg”, and bearing type labels as above but with numbers 2415-2417. One also bears the label: “Pediacus subcarinatus Mannerh. Kenai [plus two illegible letters]”. Since in the original description, Mannerheim (1852) stated that the collector was Frankenhaeuser and listed the locality as “Kaknu” (an early name for Kenai), it seems unlikely that these three specimens can be part of the type series. Nevertheless, because Mannerheim (1852) did not explicitly state that he saw only one specimen, I am designating the first listed specimen (2414) as lectotype.

Diagnosis: In many ways, this species is the most distinctive among the New World species. The com-
**Pediacus subglaber** LeConte, **new status**

Figs. 6, 11, 18, 23-24, 26

*Pediacus subglaber* LeConte 1854: 73  
*Pediacus depressus* var. *subglaber* LeConte, Casey 1884: 79  
*Pediacus depressus*, Hetschko 1930: 14, in part (not Herbst 1794: 286)

**Type Material:** Holotype male, in MCZC, with following data: “[discolored disk]”/“7338.”/”Type 6784”/“P. subglaber N.C. LeC.”

**Diagnosis:** Length, 3.3-4.0 mm. Individuals of this species are very similar to those of *P. hesperoglaber*, n.sp., and of the European *P. depressus*. They differ from those of the former by larger eyes and by those of the latter by smaller eyes (Fig. 6) and from both by the structure of the male genitalia (Fig. 18). The discal impressions of the pronotum are usually more strongly developed in *P. subglaber* than in *P. hesperoglaber*, n.sp. *Pediacus subglaber* also has larger, denser punctures on the head and pronotum, with the surface between smooth and glossy. Individuals also tend to be slightly darker in color than those of *P. hesperoglaber*. Although the male genitalia are very similar in the two North American species, there are differences in the shape of the parameres and the detailed structure of the median lobe (compare Figs. 17 and 18). *Pediacus subglaber* is the only member of the genus known to occur in eastern North America south of New England.

**Distribution:** The type locality is North Carolina. Specimens examined, 71, from: Canada: Ontario, Quebec; United States: Alaska, District of Columbia, Georgia, Illinois, Indiana, Kentucky, Maryland, Michigan, North Carolina, Pennsylvania, Tennessee, Vermont, Virginia, West Virginia.

**Discussion:** Casey (1884) treated this species as a variety of *P. depressus*, while Hetschko (1930) listed it as a synonym. Although it is similar to *P. depressus* the male genitalia are quite distinct (Fig. 18) and the eyes are larger in *P. depressus*. The known distribution of *P. subglaber* is primarily Appalachian and it seems to be uncommonly collected.
**Pediacus hesperoglaber** Thomas, new species

Figs. 5, 12, 17

**Diagnosis:** Individuals of this species are very similar to those of *P. subglaber*, which occurs in the eastern U.S.; see the diagnosis under that species.

**Description:** Holotype (male). With characters of Cucujidae: *Pediacus*, plus: Color red-testaceous, margins of pronotum and elytra a little paler. Pubescence pale, appressed, inconspicuous. Length, 3.2 mm.

Head transverse, 2.06x wider than long, with margins of epistome weakly margined; eyes moderate, hemispherical (ocular index, 0.75), without denticle behind eye; punctures small medially, increasing in size and density laterally; surface between punctures increasingly microreticulate laterally; antennae with antennomere VII conspicuously larger than either VI or VIII.

Thorax with pronotum transverse (1.30x wider than long), laterally with 4 denticles; lateral margin narrowly explanate, slightly reflexed, more so posteriorly; disc vaguely impressed; surface sculpture as on head. Elytra coriaceous basally, with small, shallow punctures; punctures rapidly decreasing in size caudad of basal fifth, represented by small, glossy tubercles; surface dull, densely, finely granulate.

Male genitalia as in Fig. 17.

**Variation:** Length, 3.2-3.9 mm. The pronotal discal impression is more distinct in some specimens, and the lateral pronotal denticles are often rounded.

**Distribution:** Specimens examined, 52, from: Canada: British Columbia; United States: Arizona, California, Colorado, Montana, New Mexico, Oregon, Washington.

**Type Material:** Holotype, male [FSCA], with following label data: “ARIZONA: St. Catalina Mts. elev. 8500 ft May 31 1969”. Paratypes, 51, with label data as in Appendix.

**Etymology:** The species epithet is derived from the Latin *hesperus*, west, and *glaber*, smooth, to emphasize its identity as the western relative of *P. subglaber*.

**Discussion:** This species is closest to *P. subglaber*. The small but consistent differences in eye size, surface sculpture, and genitalic structure seem more than adequate to justify its recognition as a separate species.

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**Pediacus ommatodon** Thomas, new species

Figs. 2, 8, 19

**Diagnosis:** This is the only known New World species north of Mexico with angulate temples (Figs. 2, 8), making it one of the easiest species to recognize. The male genitalia, especially the shape of the armature of the internal sac, are very distinctive (Fig. 19).

**Description:** Holotype (male). With characters of Cucujidae: *Pediacus*, plus: Color testaceous, mouth-
parts, legs, and elytra a little paler. Pubescence pale, appressed, inconspicuous. Length, 4.8 mm.

Head transverse, 2.0x wider than long, with margins of epistome strongly margined; eyes large, but not strongly convex (ocular index, 0.75), with denticle behind eye; frons sparsely punctate, punctures increasing in size and density laterally; surface between punctures smooth and glossy; antennae with antennomere VII not distinctly larger than VI or VIII.

Thorax with pronotum transverse (1.25x wider than long), lateral margin narrowly explanate, slightly reflexed basally; disc strongly impressed; narrowly impunctate medially, punctures increasing in size and density laterally; surface between punctures microreticulate and glossy. Elytra distinctly but finely punctate to apex; surface microreticulate, shiny.

Male genitalia as in Fig. 19. The shape of the armature of the internal sac is unique among known New World Pediacus.

**Variation:** Length, 3.4-4.8 mm. The shape of the pronotum is quite variable in this species, but usually the subapical denticle is produced and conspicuous.

**Distribution:** Specimens examined, 192, from: **Canada:** British Columbia; **United States:** California, Nevada, Oregon, Washington.

**Type Material:** Holotype, male [CNCI], with following label data: “WASH., La Push V.14.1968 Campbell&Smetana”; **Paratypes,** 191, with label data as in Appendix.

**Etymology:** A combination of the Greek words for “eye” and “tooth,” referring to the toothed temple behind the eye, used as a noun in apposition.

**Discussion:** A single specimen in SBMN with label data: “CA: Tulare Co. 36.950° N, 118.353° W Sequoia NF; Mosquito Mdw. vi.24.2003; M. Caterino under bark Abies”, cannot be placed. It is similar to *P. ommatodon*, but the denticle behind the eye is about twice as long. Unfortunately, it is a female and resolving its status will have to await collection of male examples.
**Pediacus stephani** Thomas, new species  
Figs. 3, 9, 22, 30

**Diagnosis:** The small eyes (Fig. 3), straighter sides of the pronotum (Fig. 3), more depressed body form (Figs. 3, 9), and the structure of the male genitalia (Fig. 22) separate members of this species.

**Description:** Holotype (male). With characters of Cucujidae: *Pediacus*, plus: Color testaceous, mouthparts, legs, and elytra a little paler. Pubescence pale, appressed, inconspicuous. Length, 3.3 mm.

Head transverse, 1.87x wider than long, with margins of epistome weakly margined; eyes small, flat (ocular index, 0.80), without denticle behind eye; punctures medially smaller and more widely spaced medially, increasing in size and density laterally; surface between punctures lightly microreticulate; antennae rather short, with antennomere VII not distinctly larger than VI or VIII.

Thorax with pronotum transverse (1.32x wider than long), lateral margin broadly explanate, not inflexed, with 4 large denticles, finely denticulate between larger denticles; disc hardly impressed; narrowly impunctate medially, punctation and microreticulation otherwise as on head. Elytra coriaceous basally, with large, coarse punctures; punctures rapidly decreasing in size caudad of basal fifth; surface dull, densely finely granulate.

Male genitalia as in Fig. 22. The long, narrow parameres are unique among known New World species of *Pediacus*.

**Variation:** Length, 2.7-3.6 mm.

**Distribution:** Specimens examined, 52, from: Canada: British Columbia; United States: California, Nevada, Washington.

**Type Material:** Holotype, male [MCZC], with following label data: “Olympia II-1 Wash/Liebeck Collection”; Paratypes, 51, with label data as in Appendix.

**Etymology.** I take pleasure in naming this species after Karl Stephan, perhaps the best small beetle collector ever.

**Discussion:** The small eyes and pronounced triangular shape of the head are reminiscent of members of the Australian genus *Platisus* Erichson.

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**Pediacus andrewsi** Thomas, new species  
Figs. 4, 10, 20

**Diagnosis:** Length, 3.5-4.5 mm. The shape of the eyes, which are large but not bulging (Fig. 4), the reflexed lateral margins of the pronotum, and the rather thick antenna (Fig. 10) should permit recognition of this species. The male genitalia are distinctive both in the short and obliquely truncate parameres and the large fibrous armature of the internal sac (Fig. 20).

**Description:** Holotype (male). With characters of Cucujidae: *Pediacus*, plus: Color testaceous, mouthparts, legs, and elytra a little paler. Pubescence pale, appressed, inconspicuous. Length, 4.0 mm.

Head transverse, 2.0x wider than long, with margins of epistome strongly margined; eyes small, flat (ocular index, 0.76), without denticle behind eye; frons minutely, sparsely punctate, punctures increasing in size and density laterally and basally; surface between punctures smooth and glossy; antennae rather thick, with antennomere VII larger than VI but not VIII.

Thorax with pronotum transverse (1.21x wider than long), lateral margin moderately explanate, strongly inflexed especially basally; disc strongly impressed; narrowly impunctate medially, punctures increasing in size and density laterally; surface between punctures smooth and glossy; antennae rather thick, with antennomere VII larger than VI but not VIII.

Male genitalia as in Fig. 20. The long, narrow parameres are unique among known New World species of *Pediacus*.

**Variation:** Length, 3.4-4.5 mm.

**Distribution:** Specimens examined, 78, from: Canada: British Columbia; United States: California, Idaho, Oregon, Washington.

**Type Material:** Holotype, male [CDAE], with following label data: “CALIF: El Dorado Co. 0.5 mi. N Stumpy Meadows Lake 4200' IV-22-1993 F. Andrews & T. Eichlin”. Paratypes, 77, with label data as in Appendix.

**Etymology.** This species is named after CDAE coleopterist Fred Andrews, now retired, who collected the type specimen.
Discussion: The short, obliquely truncate parameres, and the fibrous armature of the internal sac are unique among known New World *Pediacus*.

*Pediacus gracilis* Thomas, **new species**
Figs. 13, 21

Diagnosis: Individuals of this species are rather small and narrow (Fig. 13) and most specimens are bicolored, with the elytra darker than the head and pronotum. The male genitalia are distinctive (Fig. 21).

Description: Holotype (male). With characters of Cucujidae: *Pediacus*, plus: Color red-testaceous, mouthparts, antennae, and legs a little paler; elytral disc infuscate. Pubescence pale, appressed, inconspicuous. Length, 3.2 mm.

Head transverse, 1.83x wider than long, with margins of epistome weakly margined; eyes moderate, hemispherical (ocular index, 0.75), without denticle behind eye; almost impunctate medially, punctures increasing in size and density laterally; surface between punctures smooth and glossy; antennae with antennomere VII larger than either VI or VIII.

Thorax with pronotum transverse (1.25x wider than long), laterally with 4 denticles; lateral margin narrowly explanate, not inflexed; disc impressed, more deeply anteriorly; narrowly impunctate medially, puncturation and microreticulation increasingly dense laterally. Elytra coriaceous basally, with large, coarse punctures; punctures rapidly decreasing in size caudad of basal fifth, represented by small, glossy tubercles; surface dull, densely, finely granulate.

Male genitalia as in Fig. 21.

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Figures 32-39. *Pediacus* spp., habitus. 32, 36) *P. major* (Cotype, BMNH); 33, 37) *P. similis* (Cotype, BMNH); 34, 38) *P. confertus* (Cotype, BMNH); 35, 39) *P. mexicanus* (Cotype, BMNH)
Variation: Length, 2.9-3.6 mm. The coriaceous sculpture at the base of elytra is most pronounced in the holotype, less pronounced in several of the paratypes, and not visible in the rest.

Distribution: Specimens examined, 8, from: United States: California, Washington.

Type Material: Holotype, male [MCZC], with following label data: “Olympia II.1 Wash/Liebeck Collection”; Paratypes, 7, with with label data as in Appendix.

Etymology: The species epithet refers to the rather small, delicate form of this species compared to other members of the genus.
Figures 44-47. Mexican *Pediacus* spp., male genitalia. 44) *P. major*; 45) *P. similis*; 46) *P. confertus*, inset, armature of internal sac, reduced; 47) *P. mexicanus*. 
Discussion: This is the least commonly collected member of the genus in North America and the one with the most restricted distribution, being known only from six localities in two states.

Key to adults of *Pediaicus* in America north of Mexico

1. Head with small but distinct denticle behind eye (Fig. 2); male genitalia as in Fig. 19 ..................
   1'. Head without distinct denticle behind eye; male genitalia different ................................. 2

2. Eyes small (Fig. 3), ocular index 0.8 or more; body exceptionally flat dorsally; lateral pronotal margins with many small secondary denticles (Fig. 3); male genitalia as in Fig. 22 ....... *P. stephani*
   2'. Eyes larger, ocular index < 0.8; body not as flat dorsally; lateral pronotal margins without many small secondary denticles ................................. 3

3. Eyes follow the outline of the head, not bulging (Fig. 4); lateral pronotal margins strongly reflexed (Fig. 4); antennae thick (Fig. 10); male genitalia as in Fig. 20 ..................... *P. andrewsi*
   3'. Eyes break the outline of the head, moderately to strongly bulging; lateral pronotal margins flat to moderately reflected; antennae not especially thick ................................. 4

4. Body distinctly bicolored, elytra darker than pronotum; male genitalia as in Fig. 21 .... *P. gracilis*
   4'. Body not distinctly bicolored, or if so then pronotum darker than elytra ................................. 5

5. Pronotal subapical angle usually well marked; antennomere VII only slightly larger than VI and VIII; body more flattened dorsally; surface glossier; pubescence less dense ......... 6

6. Pronotal subapical angle usually obsolete (Fig. 1); antennomere VII only slightly larger than VI and VIII and similarly shaped (Fig. 31); body less flattened dorsally; surface dull, pubescence dense; male genitalia as in Fig. 16 ..................... *P. fuscus* Erichson
   6'. Eyes larger (Fig. 6), ocular index .68-.75; pronotal discal depressions usually well developed; male genitalia as in Fig. 18; eastern U.S. ................................. *P. subglaber* LeConte

7. Pronotal subapical angle extremely (Fig. 28). The male genitalia (Fig. 15) are different.
   7'. Pronotal subapical angle not extremely (Fig. 2); antennomere VII larger and differently shaped (Fig. 41, 43), and the differences in shape between antennomere VII and VI and VIII are more extreme (Fig. 28). The male genitalia (Fig. 15) are diagnostic.

Notes on some extraterritorial species

*Pediaicus depressus* (Herbst): This European species is superficially similar to *P. subglaber*, but has larger eyes (Fig. 40, 42), and different male genitalia (Fig. 14). It is also similar to *P. dermestoides*, but the antennae are not as developed (Fig. 27), and the male genitalia are different.

*Pediaicus dermestoides* (Fabricius): This European species is similar to *P. depressus*, but generally has the disk of the pronotum infuscate and more deeply impressed (Fig. 41, 43), and the differences in shape between antennomere VII and VI and VIII are more extreme (Fig. 28). The male genitalia (Fig. 15) are diagnostic.

All of the four described Mexican and Guatemalan species have a denticle behind the eye. In the course of this study, I borrowed all of Sharp’s Biologia Centralli-Americana specimens from the British Museum to determine whether any of the western North American species had been described previously. Approximate coordinates for the Biologia localities are from Selander and Vaurie (1962).

*Pediaicus major* Sharp: This species was described from six specimens collected in Guatemala at Totonicapán (N14° 52", W91° 22") and the Quiché Mountains (N15° 00", W91° 10") at 7,000 - 10,500 ft. altitude under the bark of conifers. It contains the largest individuals in the genus, with specimens attaining more than 7 mm in length. Individuals of *P. major* (Fig. 32, 36) are very similar to those of *P. similis* but differ from individuals of that species by their larger size, glossier integument of the head and pronotum, more convex eyes, and relatively broader pronotum. The male genitalia of both species (Figs. 44-45) are very similar.

*Pediaicus similis* Sharp: This species was described from two specimens collected at Cerro Zúnil (N14° 33", W91° 29") in Guatemala. It is slightly smaller than *P. major*. The most noticeable differences between the two species are the less convex eyes in *P. similis* (Fig. 33, 37) and duller integument.

*Pediaicus confertus* Sharp: This species was described from 13 specimens from Totonicapán, 8,500 - 10,500 ft. altitude, and the Quiché Mountains, 7,000 - 9,000 ft. altitude, under the bark of firs and at Capetillo (N14° 29", W90° 48") in Guatemala. Its surface sculpture is very dense, giving it a distinctive dull appear-
ance (Fig. 34, 38). The male genitalia (Fig. 46) are diagnostic.

*Pediacus mexicanus* Sharp: Described from only two specimens from “Jacale”, Mexico. This probably refers to Jacala in Hidalgo (Selander and Vaurie 1962) (N21° 01”, W99° 11”). It is a glossier insect than *P. confertus* (Fig. 35, 39). The male genitalia (Fig. 47) are diagnostic.

An apparently undescribed Mexican species is represented by specimens from Chiapas and Puebla in the CNCI. It is a heavily punctate species similar to *P. confertus*, but has large eyes, no denticle behind the eye, and differently shaped pronotum. Another apparently undescribed Mexican species is represented in the CNCI by two specimens from Nuevo Leon. It is similar to the apparently undescribed California species mentioned above in the long denticle behind the eye, but differs significantly in antennal structure.

**Checklist of described *Pediacus* of the world**

“*Pediacus concolor*”, “*Pediacus jugularis*”, and “*Pediacus centralis*” were credited to Sharp 1899 by Hetschko (1930). They all were incorrectly listed in *Pediacus* by Hetschko and are properly members of *Inopeplus* Smith (Salpingidae).

*Pediacus andrewsi* Thomas, n. sp.; western North America

*Pediacus ater* Grouvelle 1897: 396; Sumatra

*Pediacus blutanicus* Sen Gupta 1978: 221; Bhutan

*Pediacus confertus* Sharp 1899: 508; Guatemala

*Pediacus depressus* (Herbst 1794: 286); Palaeartic

*Pediacus dermestoides* (Fabricius 1792: 96); Palaeartic

*Pediacus elongatus* Sen Gupta 1978: 219; Bhutan

*Pediacus fuscus* Erichson 1845: 313; Holarctic

*Pediacus subcarinatus* Mannerheim 1852: 363; Alaska

*Pediacus planus* (LeConte 1850: 223); Michigan

*Pediacus gracilis* Thomas, n. sp.; western North America

*Pediacus hesperoglaber* Thomas, n. sp.; western North America

*Pediacus japonicus* Reitter 1874: 516; Japan

*Pediacus kurosawai* Sasaji 1983: 18; Japan

*Pediacus major* Sharp 1899: 507; Guatemala

*Pediacus mexicanus* Sharp 1899: 508; Mexico

*Pediacus montivagus* Champion 1923: 78; India

*Pediacus ommatodon* Thomas, n. sp.; western North America

*Pediacus rufipes* Grouvelle 1908: 461; India

*Pediacus similis* Sharp 1899: 508; Guatemala

*Pediacus smirnovi* Nikitsky and Belov 1979: 58; Azerbaijan and Iran

*Pediacus stephani* Thomas, n. sp.; western North America

*Pediacus subglaber* LeConte 1854: 73; eastern North America

*Pediacus tabellatus* Wollaston 1864: 131; Canary Is.

**Acknowledgments**

Michael S. Caterino supplied the specimens that were the catalyst for this study. For reviewing the manuscript, I thank Paul E. Skelley, Andrew R. Cline, and S. Adam Slipinski. Alexey Tishechkin kindly provided a needed Russian translation. Adrian J. Mayor went out and found specimens in Great Smoky Mountain National Park. Charles Porter helped with nomenclatural questions. Pierre-Jolivet and Adam Slipinski helped to obtain difficult to find literature. Curators of many collections cited in the Introduction generously loaned specimens that made this study possible. This is Entomology Contribution No. 987, Bureau of Entomology, Nematology and Plant Pathology, Florida Department of Agriculture and Consumer Services.

**References cited**


Grouvelle, A. 1897. Clavicornes nouveaux des indes orientales et pays voisins. Annali del Museo Civ-
174

Volume 17, No. 3-4, September - December, 2003, INSECTA MUNDI


Appendix: Label data of paratype specimens

Pediacus hesperoglaber Thomas, new species


Pediacus ommatodon Thomas, new species

Pediacus stephani Thomas, new species


**Pediacus andrewsi** Thomas, new species


**Pediacus gracilis** Thomas, new species