

New Country and State Records, and Other Notes for Mexican Buprestidae (Coleoptera)

Richard L. Westcott

Oregon Department of Agriculture, Salem, OR 97310, U.S.A.

Thomas H. Atkinson

Entomology and Nematology Department, University of Florida,
Gainesville, FL 32611, U.S.A.

Henry A. Hespenheide

Department of Biology, University of California, Los Angeles, CA
90024, U.S.A.

G.H. Nelson

College of Osteopathic Medicine of the Pacific, Pomona, CA 91766,
U.S.A.

Abstract

Treatment is provided for 224 species and subspecies in the genera *Acherusia*, *Acmaeodera*, *Actenodes*, *Agaeocera*, *Agrilus*, *Anthaxia*, *Brachys*, *Buprestis*, *Chalcangium*, *Chrysobothris*, *Colobogaster*, *Cyphothorax*, *Dicerca*, *Dismorpha*, *Euchroma*, *Hiperantha*, *Hylaeogena*, *Leiopleura*, *Lius*, *Mixochlorus*, *Omochyseus*, *Pachyschelus*, *Polycesta*, *Psiloptera*, *Spectralia*, *Taphrocerus*, *Tetragonoschema*, *Thrincoptye*, *Trypanius* and *Tyndaris*. Of these, 44 are recorded for the first time from Mexico and 175 represent new state records. Adult host and/or habitat information is provided, usually from the label data, for 93 of the taxa. Larval host records are indicated for *Chrysobothris analis* LeConte, *C. capitata* Gory and Laporte, *C. multistigmosa* (Mannerheim) and *C. sallei* Waterhouse. *Acmaeodera sinaloensis* Duges has been discovered to breed in bamboo. A major taxonomic character of *C. multistigmosa* is discussed.

Introduction

The buprestid fauna of Mexico is rich and diverse, perhaps rivaling that of any equivalent area in the world. Despite its obvious proximity and relationship to the well known fauna of the United States, Mexico's has remained relatively unknown.

Most of the literature on the Buprestidae of Mexico is scattered, except for the monumental, albeit very incomplete, "Biologia Centrali-Americana" (Waterhouse 1882-1897).

The primary purposes of our paper are to bring together significant records from many collections in hopes of providing a better understanding of species distributions, and to stimulate further, more specific work on Mexican Buprestidae. One of us (THA) has been working for many years on the subfamilies Agrilinae and Trachyinae, which comprise by far the majority of species (many of which are undescribed) in Mexico. Our records for these groups emphasize species unknown from the country, those recorded previously from one or a very few localities, or those which also range into the United States. The last category is of special interest for all groups of Buprestidae because of current work on the U.S.D.A. Catalogue of Coleoptera (GHN).

Another of us (THA) had the opportunity to locate and make available for study the major collections of Buprestidae in the Mexico City area, some of which are not well known. This provided the original impetus for this paper and it is hoped that this will lead to a better use of these collections.

Genera and species treated in this paper are arranged alphabetically, as are the records by state. Species not previously recorded from Mexico are

grouped at the beginning of the paper. The states of Mexico are abbreviated as follows: AGS = Aguascalientes, BCN = Baja California Norte, BCS = Baja California Sur, CAMP = Campeche, COAH = Coahuila, COL = Colima, CHIH = Chihuahua, CHIS = Chiapas, DF = Distrito Federal, DGO = Durango, GRO = Guerrero, GTO = Guanajuato, HGO = Hidalgo, JAL = Jalisco, MEX = México, MICH = Michoacán, MOR = Morelos, NAY = Nayarit, NL = Nuevo León, OAX = Oaxaca, PUE = Puebla, QR = Quintana Roo, QRO = Querétaro, SIN = Sinaloa, SLP = San Luis Potosí, SON = Sonora, TAB = Tabasco, TAMPS = Tamaulipas, VER = Veracruz, YUC = Yucatán, ZAC = Zacatecas.

The collections from which particular specimen data are recorded follow those data and may refer to more than the one preceding locality. Abbreviations for these collections are given alphabetically in the acknowledgments, except for the following: BMNH = British Museum (Natural History); CNCI = Canadian National Collection, Ottawa, Ontario; CEAM = Colegio Postgraduados, Chapingo, Mexico; MAIC = M.A. Ivie, Bozeman, Montana; MCZC = Museum of Comparative Zoology, Harvard University. Collections of the authors are CHAH = Henry A. Hespenheide, GHNC = G.H. Nelson, and RLWE = Richard L. Westcott.

The following represent new country records:

Acmaeodera uvaldensis Knull. QRO, Peña Blanca, 12-IV-79, CEAM.

Actenodes metallica Waterhouse. QR, X-can Nuevo, (VI-VII)-66/67, CHAH, GHNC, RLWE.

Agrilus abductus Horn. TAMPS, 14 mi SW Cd. Victoria, 5000', 23-VII-82, RLWE.

Agrilus acuductus Waterhouse. OAX, 10 mi N Miltepéc, 4-VIII-76, GHNC. PUE, 6 km S Acatepéc, 19-VIII-82, AUEM.

Agrilus affinis Waterhouse. CHIS, 2 mi NW Pueblo Nuevo, LLU Biol. Sta., 14-VII-65, on *Acacia pennatula*, GHNC; Teopisca, 20-VI-65, TAMU; 8.6 km E Rayón, 12-IX-81, AUEM. OAX, 1 mi S San José Pacífico, 16-VII-74, TAMU.

Agrilus catalinae Knull. NAY, 4 mi NE Las Varas, 16-VII-82, CDAE, RLWE. SIN, Carr. 15, km

1099, 4-VI-62, CEAM, RLWE; 5 mi N Mazatlán, 11-VIII-65, GHNC; 7 mi N Mazatlán, 7-VII-62, CLBC, CHAH; 5.3 mi SW Soquitlán, 30-VI-82, CDAE, RLWE.

Agrilus centralis Waterhouse. CHIS, 35 mi E San Cristobal, 26-VII-57, on *Cassia emarginata*, CISC, GHNC; 24 mi NW Comitán, 2165m, 31-VII-74, RLWE. OAX, 18 mi E La Ventosa Jct., hwy.190, 21-VII-65, on *C. emarginata*, GHNC.

Agrilus cochisei Knull. DGO, Ceballos, 5-X-66 & 19-X-68, EMUS, RLWE. No information has been reported for this species since its description from specimens collected in SE Arizona.

Agrilus cupreonitens Fisher. CHIS, Arriaga, 4-VIII-69, CNCI. COL, Armería, 10-VIII-62, CEAM; Playa Santiago, 10-VIII-62, CEAM. JAL, 13 mi N Pihuamo, along Rio Salado, 11-VII-82, CDAE. MICH, 5 mi NW La Piedad, 22-VIII-64, SGWC, TAMU. NAY, 4 mi NE Las Varas, 16-VII-82, CDAE; 60 mi N Puerto Vallarta, 8-VII-82, RLWE. NL, 29 km W Linares, Santa Rosa Can., 2400', 3-VI-83, dry oak forest, RLWE. OAX, Zanatepéc, 24-IV-61, CEAM; 20 mi E Tehuantepec, 16-VIII-64; 43 km W Salina Cruz, 91 m, 14-VII-87, acacia thorn scrub, RLWE. SIN, 5 mi N Mazatlán, 27,31-VII-72, CISC; 11 mi NW Mazatlán, 4-X-68, CLBC. SLP, Tama-zunchale, 6-VII-68, RLWE. ZAC, 10 mi S Jalapa, hwy 54, 9-VII-87, CLBC.

Agrilus delectabilis Waterhouse. NL, 23.6 mi NW Linares, 3-VII-74, GHNC. This species has been previously known only from Nicaragua.

Agrilus eleanorae Fisher. GRO, 10.3 km NE Iguala, 1280 m, 5-VII-87, acacia woodland; 10.7 km SW Xochipala, 1735 m, 5-VII-87, acacia-oak woodland, RLWE; 2.1 mi NW Cacahuamilpa, 27-VII-76, GHNC. MEX, 3 mi N Valle de Bravo, 29-VI-65, GHNC. JAL, Guadalajara, 13-VII-73, DSVC. MICH, 10.6 mi S Uruapan, 24-VII-83, TAMU. NAY, San Blás, 25-VII-74, AMNH. This beetle has been known only from S. Texas.

Agrilus femoralis Waterhouse. CHIS, 2.3 mi W Las Cruces, 13-VII-62, CNCI. SIN, 8 mi S Elota, 2-VII-63, UCDC, CHAH. OAX, 21 mi S Matías Romero, 12-VII-62, CNCI. QR, 24 km N Carrillo Puerto, 27-V-84; TAMPS, 5 mi N Antigua Morelos, 25-V-74; YUC, Chichen Itzá, 10-IV-83, GHNC.

Agrilus lecontei celticola Fisher. NL, 8.6 mi SW

Montemorelos, 1-VI-83, RLWE; 28 km W Linares, Santa Rosa Canyon, 1-VI-87, GHNC. SLP, 79.5 km N Tamazunchale, 5-VI-87, RLWE. TAMPS, Nac. del Rio Frio, 5 mi S Gómez Farías, 400', 5-VI-83, trop. decid. for., RLWE.

Agrilus mimosae Fisher. SIN, Topolobampo, 18-VII-63, RLWE. NAY, 5.7 mi E San Blás, 21-VII-63, LACM. CHIH, vic. Laguna Encinitas, (1-2)-VII-87, CLBC. DGO, 28 mi SW Durango, 19-VIII-70, CLBC.

Agrilus neoprosopidis Knull. NAY, 12.3 mi NE San Blás, 21-VII-63, RLWE. This species has been known only from SE Texas.

Agrilus obolinus LeConte. NL, Chipinque Mesa, 11 mi S Monterrey, 3800', 2-IV-83, hardwood for.; 29 km W Linares, Santa Rosa Canyon, 730m, 3-VI-83; SLP, 1 mi SE La Calzada, 3900', 8-VI-83, on mesquite, RLWE.

Agrilus obscurilineatus Vogt. TAMPS, Bocatoma, 7 km SSE Gómez Farías, (25-30)-III-78, GHNC. QRO, Querétaro, 4-IX-69, CNCI. HGO, Tasquillas, 20-X-68, SBC.

Agrilus oglobini Obenberger. CHIS, 10 mi W San Cristobal de las Casas, 7700', 4-VI-74, RLWE.

Agrilus olentangyi Knull. NL, Galeana, Cerro Potosí, 3750m, 4-VI-83; Chipinque Mesa, 11 mi S Monterrey, 1160 m, 2-VI-83, hardwood for., RLWE.

Agrilus parabductus Knull, JAL, Carr. 15, km 786, 25-V-62, CEAM.

Agrilus planatus Waterhouse. CHIS, 14.7 km W San Cristobal de las Casas, 1-X-86, GHNC.

Agrilus refectus Waterhouse. HGO, 6 mi E Tulancingo, rd. 130, 24-VI-62, on *Quercus* sp., GHNC. NL, Chipinque Mesa, 11 mi S Monterrey, 1160 m, 2-VI-83, hardwood for., RLWE, CHAH. QRO, 32 km SW Xilitla, 5700', 3-VI-87, GHNC.

Agrilus shoemakeri Knull. SON, Minas Nuevas (near Alamos), 25-VIII-61, RLWE. One of us (RLW) examined three other male specimens, including the holotype, from Arizona. There is slight variation in length of the dorsal pubescence, particularly on the elytra, and in the male genitalia, which are more evidently convergent apically on the

holotype and the specimen from Mexico, while the others have this structure subparallel apically.

Agrilus subtropicus Schaeffer. NL, 8.6 mi SW Montemorelos on Rayones rd., 1-VI-83, RLWE.

Agrilus viridescens Knull. SLP, 33.8 mi N Entronque El Huizache, 2-VI-87, "mesquite chaparral," RLWE; 12 km W Rio Verde, (1-10)-VII-83, GHNC.

Brachys nevermanni Fisher. CHIS, 47.3 mi S Palenque on #199, 2300', 5-VII-83, trop. lowland for., RLWE.

Brachys querci Knull. HGO, 10 mi N Zimapán, 6300', 18-VIII-71, RLWE.

Chrysobothris belti Waterhouse. QR, X-can Nuevo, IV & VI-67, GHNC.

Chrysobothris edwardsi Horn. SON, Desemboque, (1-10)-IX-53, CASC. Van Dyke (1942:115) mentioned a specimen from "Hidalgo, Mexico" under *C. thoracicus* Schaeffer; however, a specimen from his collection (CASC) labelled "Hidalgo Co., N. Mex." is undoubtedly the one which he referred to as *C. edwardsi*.

Chrysobothris fiskei Fisher. NL, 4.7 mi E Galeana, 10-VI-87, BKDC; hwy. 58, at Galeana jct., 1-VI-87, RLWE.

Chrysobothris ignicollis Horn. DGO, 4 mi S Rio Florida, 2-VII-67, on *Juniperus* sp., CLBC.

Chrysobothris viridiimpressa Gory and Laporte. CHIS, Huixtla, XI-39, UNAM. QR, X-can Nuevo, (VI-VII)-67, CHAH, RLWE. YUC, Piste, near Chichen Itzá, (VI-IX)-68, GHNC.

Hylaeogena hydroporoides (Waterhouse). CHIS, 4 mi NW Pueblo Nuevo, river bajada, 30-VII-65, GHNC; 4 mi S Palenque Ruins, 250', (4-25)-VII-83, trop. lowland for., RLWE.

Pachyschelus octodentatus robustus Waterhouse. CHIS, Simojovel, 28-IX-61, CEAM.

Pachyschelus signatus Waterhouse. CHIS, Rio del Salvador, 4 km NW Ixhuatán, 28-VIII-65; TAMPS, Bocatoma, 7 km SSE Gómez Farías, (19-23)-V-79; VER, Fortin de las Flores - Sumidero,

Planta Cervecería, Ing. Daniel Rábago Res., 2500-3000', (20-23)-V-65, GHNC.

Polycesta goryi Saunders. YUC, Mérida, VIII-70, MCMC. Cobos (1981) synonymized *P. abdita* Barr under this species and provided distributional data.

Taphrocerus dietzi Fisher. GRO, El Quemado, km 389, Carr. México-Acapulco, 7-VII-63, CEAM.

Taphrocerus exiguum Obenberger. CHIS, 4 mi S Palenque Ruins, 250', (2-4)-VII-83, trop. lowland for., RLWE.

Taphrocerus finitimus Obenberger. MICH, 10 mi W Cuatros Caminos, 12-VII-72; TAMPS, Bocatoma, 7 km SSE Gómez Farías, 27/28-V-79, GHNC; Nacimiento del Río Frío, 5 mi S Gómez Farías, 400', 5/6-VI-83, trop. decid. for., RLWE. VER, Villa Cardel, 3-IV-61; Cosamaloapan, 20-VII-62, CEAM.

Taphrocerus purpureipennis Waterhouse. QR, Kohunlich Ruins, ca. 30 mi E Chetumal, 350', 15/16-VII-83, mixed cohune palm for., RLWE.

Taphrocerus sulcifrons Fisher. CHIS, Finca Cacahuitz, 19 km NE Bochil, 28-IX-61, CEAM; 3 mi NW Pueblo Nuevo, 27-VII-65, GHNC. JAL, Carr. 15, km 786, 25-V-62, CEAM; Est. Biol. Chamela, 25-IX, 10-X-85, UNAM. MICH, 10 mi W Cuatro Caminos, 12-VII-72, GHNC. SIN, Los Mochis, 28-V-55; SON, Navojoa, 2-VIII-57; VER, Villa Cardel, 3-VI-61, CEAM.

Taphrocerus tenellus Gory. CAMP, 80 mi SW Escárcega, 4-VIII-74, RLWE. This species has been recorded only from South America but occurs throughout Central America (Hespenheide, unpublished).

Tetragonoschema humeralis Waterhouse. CHIS, Aguacero Edo., 6-VI-87, CLBC. JAL, 27.4 km S Chamela, 19-VII-87, GHNC. MICH, 9 mi E Capirio, 800', 6-VII-70, RLWE. OAX, 10.6 km N Jct. 190/135, 1920 m, 21-VII-87, wet oak forest, RLWE; 15 mi N La Ventosa Jct., hwy. 185, 8-VII-65; 3 mi W Tehuantepec, 9/20-VII-65, on *Cnidoscolus urens*, GHNC, RLWE. SIN, 5 mi N Mazatlán, 9-VIII-65, on *Acacia* sp., GHNC. VER, Paso del Toro, 1-VII-87; C.A.E. Cotaxtla, 6-VII-87, CLBC.

Tyndaris chamaeleonis (Skinner). TAMPS, 77

km NE Cd. Victoria, 305 m, 5-VI-87, "mesquite chaparral," RLWE; 10 mi N Aldama, 13-VI-85, D.J. Heffern Coll.

The following represent new state records with exceptions as noted:

Acherusia tristis Thomson. JAL, 8.6 km N Chamela, 15-VII-87, RHTC. OAX, San Gerónimo, 5-VIII-23, RLWE; 3 mi W Tehuantepec, 19/20-VII-65, on *Caesalpinia pulcherrima*; 7 mi W Tehuantepec, 1-VII-72, GHNC. QR, Caleta de Xel Ha, 1-IX-74, RLWE. SIN, 5 mi N Mazatlán, 10-VIII-65, GHNC; between Villa Unión and Hualamo, 5-VII-87, on branches of *Randia echinocarpa*, R.K. Velten Coll. The first Mexican record was given by Cobos (1980) from specimens collected in YUC. Waterhouse (1889) recorded *A. piliventris* Saunders from YUC but no mention of this specimen was made by Cobos, and likely it represents *A. tristis*.

Acmaeodera acuminata Kerremans. JAL, 20 mi NE Barra de Navidad, 14-VII-82, RLWE. This distinctive species was described from Mexico with no specific locality. It has been known only by the holotype (BMNH), of which a slide, taken by W.F. Barr, has been compared with the specimen from JAL.

Acmaeodera cribicollis Horn. SLP, 5.5 mi E Santo Domingo, 11-VI-87, BKDC. In Mexico this species has been recorded only from one locality in BCN (Van Dyke 1942).

Acmaeodera cuprina Spinola. Waterhouse (1882, 1889) recorded this species from GRO, MICH, OAX, SLP and VER. A specimen from CHIH was mentioned as differing by being "of a golden-green color"; however, this probably should be referred to *A. resplendens* Van Dyke. Cazier (1951) discussed the similarity between these species, and several other related species have been described. A detailed study is necessary to assess the species limits within this group. We have examined specimens of *A. cuprina* from the following other areas: DF, La Magdalena, 20-IX-33; San Andrés Totoltepec, 18-XI-65, MCMC. DGO, Buenos Aires, 19-X-82; El Salto, 18-X-82; GTO, Sta. Rosa, 23-IX-41, 2500m, UNAM. JAL, Ajijic, 18-VII-66; MEX, Sn. Rafael, 22-X-80, 2400m, CEAM; Malinalco, IX-41; MOR, Tepoztlán, 28-IX/1-X-45, X-51, UNAM; Tetela del Volcán, 14-I-78, UAEM; Cuautla,

5-X-80, UNAM, RLWE; Yautepec, 22-VIII-82, CEAM. TLAX, Mariano Matamoros, 25-IX-82, CEAM. One of us (RLW) collected specimens of this species during X-88 on white, yellow or reddish-pink flowers of various composites at elevations ranging from 610-2250m in MICH, always where oaks were growing. Beetles also were taken from freshly cut and partially peeled oak fence posts in JAL, 12.5 km NW Mazamitla, 2000m, 16-X-88. Undoubtedly oaks are hosts for this species.

Acmaeodera davidsoni Barr. CHIH, 7.1 mi W Concho, 23-VII-82, CDAE; 21 km N Cd. Camargo, 9-VIII-83, acacia scrub, RLWE. DGO, Rodeo, 22-VII-82, CDAE, RLWE. This species appears to be a Chihuahuan Desert member of the *stigmata* group, and what Cazier (1951) recorded from CHIH as *A. bivulnera* Horn is undoubtedly *A. davidsoni*.

Acmaeodera flavomarginata (Gray). This species is abundant and occurs from Texas, throughout most of Mexico, to Guatemala. It was described from Brazil, and is recorded from Chile and Guadalupe; these localities seem doubtful, are perhaps adventive, and need verification if they are to be accepted. *A. contigua* Kerremans and *A. proxima* Waterhouse have been considered synonyms of *A. flavomarginata*, but the wide range and variability of this species should provoke further taxonomic consideration. We have examined numerous specimens from many localities in the following states; however, these will serve as vouchers: CAMP, 1 mi S Becal, 5-VIII-74; 6 mi N Escárcega, 4-VIII-74, RLWE. CHIS, Mpo. Tuxtla Gutierrez, Mirador Presa Chicoasen, Can. El Sumidero, 518m, 9-IX-76, CASC. MEX, Chapingo, 10-VIII-63; Montecillos, 2240m, 27-VIII-82, CEAM. MOR, Yautepec, 18-VII-79, UAEM, 16-IX-82, CEAM; Cuernavaca, 8-X-79, CEAM. NAY, 7 mi E San Blás, (27-31)-VIII-61, RLWE. QR, 25 km W Felipe Carrillo Puerto, 15-X-86, EMUS. SIN, 44 mi E Villa Unión, 28-VIII-60, RLWE. TAMPS, Cañon del Abra, 2-X-53, UNAM; 40 km N Soto la Marina, 5-IX-75, RLWE. Specimens have been collected from flowers of *Bidens pilosa*, *Simsia amplexicaule* and *Tithonia tubaeformis* (all Asteraceae) in the state of Mexico.

Acmaeodera flavopicta Waterhouse. NL, 4 mi E Galeana Jct., 1-X-82; 46 mi NW San Roberto, 6800', 12-IX-82, RLWE. TAMPS, 6-9 km N Río Guayalejo, 14-X-85, RHTC.

Acmaeodera flavosparsa Waterhouse. MOR,

Cañon de Lobos, 1220m, 25-IX-52, GHNC; 3-IX-79, CEAM; 15-X-86, RLWE; Sta. Catarina, 13-IX-80, CEAM; Cuernavaca, 5-VII-81, UAEM, RLWE; Tepoztlán, 1-X-45; Nepopalco, 18-IX-84, UNAM.

Acmaeodera gibbula LeConte. SLP, 33.8 km N Entronque El Huizache, 2-VI-87, "mesquite chaparral," RLWE.

Acmaeodera haemorrhoa LeConte. This species occupies a range similar to that of *A. flavomarginata*, and often is common where found. We are interpreting it as a highly variable species which needs further study. In literature prior to 1975, information on this species will be found under *A. rubronotata* Laporte & Gory. HGO, Tasquillo, 17-IX-77; MEX, Malinalco, 8-VIII-43, UNAM. OAX, Cuicatlán, 13-XII-77, CEAM. SON, Minas Nuevas, near Alamos, 28-VIII-59; 14 km N Guaymas, 8-IX-80, RLWE. TAMPS, 40 km N Soto la Marina, 5-IX-75; Carr. 101, 5 mi S Cd. Victoria, 21-X-80, RLWE; 6-9 km N Río Guayalejo on Rte. 85, 14-X-85, SGWC. Specimens from the latter 2 localities represent a melanic population, some specimens of which are devoid of yellow elytral markings.

Acmaeodera impulvata Mannerheim. JAL, Estación de Biología Chamela, 21-X-77, UNAM; 12-X-81, 80m, flor de *Tithonia rotundifolia*, CEAM. VER, Veracruz, "Ant. Col. Mus. Hist. Nat. 908," UNAM. This species was discussed and distributional records given by Westcott et al. (1979).

Acmaeodera knabi Fisher. JAL, Estación de Biología Chamela, 5 km SE Chamela, 13-VII-81, homotype W.F. Barr, RLWE. This species has been known only by the type from OAX. The specimen from JAL differs in that the elytra lack two discal spots on one side and one on the other.

Acmaeodera lateralis Chevrolat. HGO, 12 km S Venados, 24-X-79, GHNC. MOR, Cañon de Lobos, 17-X-84, RLWE. Waterhouse (1882) listed this species only from "Mexico, Puebla", overlooking Chevrolat's (1833) locality, Tehuacán, which is in this state.

Acmaeodera longipennis Waterhouse. This species has been known only from the original description, with no specific locality data. COAH, Can. de la Carbonera, nr. Saltillo, 21-VIII-65; Los Pinos, 10 mi SE Saltillo, 6800', 24-IX-76; HGO, 10 mi S Los Nogales, 2200m, 17-VIII-77; NL, Chi-

pinque Mesa, 4300', 20-IX-75; TAMPS, 15 mi SW Cd. Victoria, 5000', 19-IX-76, GHNC.

Acmaeodera maculifera Horn. CHIH, Juárez, 5-IX-81, A. Allen Coll., Boise, Idaho. COAH, 37.5 mi W Paila, 24-IX-86, BKDC. This is the second report of this species from Mexico; the first was discussed by Westcott et al. (1979).

Acmaeodera oaxacae Fisher. JAL, Est. Biol. Chamela, 24-VII-86, UNAM.

Acmaeodera paradisjuncta Knull. DGO, Res. Biósfera Mapimí, 23-XI-80, "maguesal entre excremento de vaca", MCMC. In Mexico the only recorded localities are nearby in COAH (Cazier, 1951). The only recorded host plant is a species of sotol, *Dasyliion*, (Westcott et al. 1979), so its association with the related genus *Agave* (maguey=patch or planting of agaves) may be significant.

Acmaeodera pinalorum Knull. SIN, 10-12 mi N Los Mochis, 27-VII-84, BKDC.

Acmaeodera resplendens Van Dyke. SIN, 20 mi NE Concordia, 2-IX-57, Brigham Young Univ. Coll. SON, Yecora, Mesa de Campanero, 14-VIII-67, CIAN.

Acmaeodera rubronotata Laporte and Gory. SIN, 30 km W El Palmito, (18-21)-X-78, LACM.

Acmaeodera scalaris Mannerheim. GTO, Yuriria, 4-IX-81, 1850m, on corn, CEAM. VER, "Ant. Col. Mus. Hist. Nat. 896", UNAM. Many new distributional records were provided by Westcott et al. (1979). This variable species, which is common in the SW U.S., has now been recorded from every Mexican state except AGS, BCN, BCS, CAMP, QR, TAB and YUC. It has been collected from a wide variety of flowers, mostly in the Asteraceae; however, the only evidence of a larval host was provided by Vogt (1949) who recorded adults on freshly cut *Acacia farnesiana*. One of us (RLW) observed them on dried cut *Cercidium* sp. in MICH, 18 mi S Capriño, 13-X-88.

Acmaeodera sinaloensis Duges. Duges (1891) provided the only data for this species, "Motage, Sinaloa", and his type cannot be located. However, his description leaves no doubt as to the identity of this beautifully distinctive species. GRO, 2.1 mi NW Cacahuamilpa, 27-VII-83, RLWE. NAY, Acaponeta, reared ex. bamboo, 21-III-46; PUE,

Chietla, 13-IX-44, in bamboo, USNM. There is another specimen taken from bamboo in SIN (no other locality or date), USNM; and one which was intercepted in bamboo at the U.S. border in Nogales, Arizona, 18-VI-45, WFBC. This is a very interesting host record in that we are not aware of any other species of *Acmaeodera* which utilizes a member of the Gramineae as a host.

Acmaeodera stellaris Chevrolat. There are no specific locality records in the literature for this species, and it has been known definitely only by the type (BMNH). The identity of the following specimens was confirmed when S.G. Wellso compared one of them with the type. QR, 18/24 km N and 31 km S Felipe Carrillo Puerto, 29/30-V-84; 5 km S Playa del Carmen, 2-VI-84, GHNC, RLWE; 5 km E Coba, 1-VI-87, CLBC. SLP, El Salto, 21-VII-62, GHNC. TAMPS, Bocatoma w.s., 7 km SSE Gómez Farías, 4-VI-82, GHNC. YUC, 2 km E Chichen Itzá and Xcalacoob, 26/27-V-84, GHNC, RLWE.

Acmaeodera superba Waterhouse. MOR, Tlayacapan, 1-X-79, CEAM.

Acmaeodera trizonalis Kerremans. MICH, 30.6 km N La Mira, 610m, 12-X-88, RLWE. Westcott et al. (1979) called this species "apparently uncommon," as even at that time it was known from few specimens. However, in recent years, fall collecting in the coastal regions from JAL to GRO has produced large series, mostly from the forested hilly areas near the coast. The beetles have usually been taken from the flowers of several Asteraceae, and appear to be most abundant along narrow roads or similar openings in the forest. One of us (RLW) collected them from *Tithonia rotundifolia* (Asteraceae) and small pink flowers of a legume vine at JAL, Est. Biol. Chamela, 10-X-88.

Acmaeoderopsis chisosensis (Knull). ZAC, 22 mi NE Zacatecas; hwy. 54, 10.3 mi SW Trop. Cancer and 16.5 mi NE road to Conc. de Oro, 10-VII-87, on *Acacia farnesiana*, CLBC. This species was first recorded as far south as Durango in Mexico by Nelson et al. (1981). Apparently it and the closely related *A. hulli* are broadly sympatric in central Mexico.

Acmaeoderopsis hulli (Knull). COAH, 37.5 mi W Paila, 24-IX-86, BKDC.

Actenodes bifasciata Waterhouse. Recorded

only from VER, we add: QR, X-can Nuevo, VI-67, CHAH, RLWE. TAMPS, Bocatoma w.s., 7 km SSE Gómez Farías, 4-VI-82, GHNC. YUC, Mpio. Tinum, Piste, V-68, CHAH, RLWE.

Actenodes calcarata Chevrolat. COAH, hwy. 57, 40 mi S Nueva Rosita, 25-VI-65, on *Acacia constricta*, GHNC. COL, 8 mi N Tecomán, 25-VII-66, DSVC, RLWE; 31 km SE Colima, 13-VII-81; JAL, 25 km NW Magdalena, 24-VI-81; 8.6 km N Chamela, 17-VII-87, RHTC, RLWE. NAY, 12.3 mi NE San Blás, 21-VII-63, RLWE. QR, X-can, VI-67, CEAM. SLP, 41 mi N San Luis Potosí, 26-VI-65, on mesquite; SIN, 5 mi N Mazatlán, 18-VII-72, GHNC; 2 mi E San Blás, 5-VII-63, SDMC; 35 km SE Culiacán, 75m, 10-VIII-79; SON, Alamos, (15-20)-VII-58, RLWE. It has been collected on *Acacia pennatula* in OAX (GHNC). This widespread beetle occurs from the SW U.S. to Colombia.

Actenodes chalybeitarsus Chevrolat. MICH, Lombardia, 1-XI-80, 780 m, CEAM. OAX, Cerro Armadillo, Valle Nacional Sierra de Juárez, 600m, 12-X-81, "ecoton selva alta con bosque perrenifolio de montaña," MCMC. QR, X-can, VI-67, CEAM. SLP, 6 mi N Tamazunchale, 30-VI-70; TAB, 34 mi W Cárdenas, 30-VII-70, RLWE.

Actenodes hopfneri Waterhouse. CHIS, 4 mi NW Pueblo Nuevo, river bajada, 30-VII-65, on *Quercus*, GHNC.

Actenodes regularis Gory and Laporte. SIN, 5 mi N Mazatlán, 18-VII-72, GHNC.

Actenodes reichei Thomson. CHIS, San Jerónimo, 10-VIII-76, GHNC.

Actenodes sallei Thomson. SIN, 5 mi N Mazatlán, 10-VIII-65, 17-VII-72, GHNC. This species has been known only by the type from "Mexico".

Actenodes undulata Waterhouse. CHIS, Simojovel, (1-16)-VIII-58, GHNC. QR, X-can Nuevo, (IV-VII)-67, VII-77, CHAH, GHNC, RLWE.

Actenodes viridicollis Kerremans. JAL, Est. Biol. Chamela, 10-X-88, on log in forest, RLWE. SIN, 15 mi N Mazatlán, 7-VIII-73 (det. confirmed by S. Bily), RLWE; 3 km E Malpicia, 31-VII-81, CLBC (compared with type in BMNH).

Agaeocera gigas (Gory and Laporte). JAL, Est.

Biología Chamela, 18-VII-80, UNAM; 12-X-82, CEAM.

Agaeocera scintillans Waterhouse. CHIS, Río Lancanja, 21-VII-78, UNAM. This represents a sizeable range extension, since this species has been recorded only as far south as NAY.

Agrilus abstersus Horn. OAX, 1 mi E Jalapa del Marqués, 15-VII-81, GHNC.

Agrilus acaciae Fisher. TAMPS, Bocatoma, 6 mi S Gómez Farías, (25-30)-III-78, GHNC; 19 mi N C. Victoria, 16-XI-48, CASC. VER, Car. 149, km 341, 22-IX-61, CEAM; Córdoba, 27-VI-72, GHNC; 5 km E Jalapa, 24-X-79, GIES.

Agrilus addendus Crotch. COAH, 20 mi S Piedras Negras, 10-VIII-59, UCDC. NL, 29 km W Linares, Santa Rosa Can., 2400', 3-VI-83, dry oak for., RLWE; 50 mi N Monterrey, 20-VI-72, GHNC. TAMPS, Santa Teresa, 15-V-52, AMNH.

Agrilus arizonicus Obenberger. CHIH, Las Chinacas, Chinipas, 15-IX-76, CIAN; Cuitelo, 9-VIII-69, UCDC. NAY, 8.2 mi SW Compostela, 15-VIII-85, SDMC; Tepic, 29-VIII-69, DSVC. ZAC, Nohistlán, 6400', 23-VIII-79, UCDC.

Agrilus asperulus Waterhouse. CHIS, San Cristobal, 7-VIII-65, CEAM.

Agrilus atripennis Chevrolat. MEX, 3 mi N Valle de Bravo, 28-VI-65, GHNC; Zumpango, 11-X-70, MCMC. MOR, Yautepéc, 31-VII-63, RLWE; 4.4 mi E Cuernavaca, (6-8)-VII-74; PUE, 11.8 mi NW Izucar de Matamoros, 13-VII-74, GHNC.

Agrilus aureus Chevrolat. DF, Tacubaya, 31-VII, MCMC. MEX, Chapingo, 4-VI-82, 2240m, flor de *Sphaeralcea angustifolia* (Malvaceae); Texcoco, 17-V-82, 2240m, flor de *S. angustifolia*, CEAM; Teotihuacán, 30-VI-82, MAIC. OAX, Salina Cruz, VI-68, MCMC. SLP, 8.7 mi S Santa María del Río, 5-VII-74, GHNC.

Agrilus balaenoides Waterhouse. GRO, hwy. 95, 6 mi S Río Mexcala, 6-VIII-65, on *Acacia* sp.; OAX, Temescal, 6-VII-65, GHNC.

Agrilus bimpressus Waterhouse. PUE, 4 mi SE Izucar de Matamoros, 3800', 1-VI-74, RLWE.

Agrilus carissimus (Waterhouse). MEX, Chapingo, 29-VII-62, CEAM.

Agrilus catherinae (Chevrolat). This species is widespread and not uncommon in Mexico, though few records are in the literature. COL, Armería, 10-VII-62, CEAM; 8 mi N Tecomán, 25-VII-66, DSVC; 22 mi SW Colima, 27-VII-58; JAL, 3 mi SW Autlán, 25-VII-63, RLWE; hwy. 15, 60 mi S Guadalajara, 8-VIII-65; MEX, 3 mi N Valle de Bravo, 28-VI-65, GHNC. MOR, Cuernavaca, 16-VI-79, UAEM; Tepoztlán, 22-VI-41, 1650m, UNAM. NL, 7 mi W El Cercado, 2800', 27-VI-70, RLWE. OAX, Temescal, 26-VI-72, GHNC. SIN, 7 mi S Culiacán, 23-VIII-60, RLWE. SLP, Tamuin, 25-VI-76, UNAM. SON, 15 mi E Alamos, 16-VII-63, RLWE; Rcho. El Naranjo, Alamos, 15-IX-76, CIAN. TAMPS, Nac. del Río Frío, 5 mi S Gómez Farías, 400', 5-VI-83, trop. decid. for., RLWE.

Agrilus cavatus Chevrolat. GRO, 12 km E Telolapan, (20-27)-VII-87, CLBC. NAY, 8.2 mi SW Compostela, 15-VIII-85, SDMC. TAB, Cárdenas, 20-XI-76, RLWE.

Agrilus cavifrons Waterhouse. COL, 8 mi S Colima, 10-VII-82, CDAE. DUR, 103 mi W El Salto, 20-VII-52; OAX, 2.1 mi NW Totolapán, 7-VIII-80, GHNC. PUE, 1 mi N Coxcatlán, 28-VII-73, DSVC, RLWE. SIN, 2 mi E Choix, 19-XII-67, UCDC.

Agrilus cephalotes Waterhouse. CHIS, 3 mi NW Pueblo Nuevo, 26-VII-65, GHNC; 1 mi E Rizo de Oro, 3600', 3-VI-74; OAX, 30.6 km S Suchixtepéc, 1294 m, 12-VII-87, wet oak-pine for., RLWE.

Agrilus cercidii Knull. SON, Aguamarina, Alamos, 3-VIII-57, CEAM; 6 km NNW San Carlos, 11/15-VII-83, Malaise trap, CDAE, RLWE.

Agrilus cerinoguttatus Chevrolat. MICH, Barranca Hondo, 19 mi S Uruapan, 3000', 5-VII-70; NAY, 16 mi NE San Blás, 21-VII-63, RLWE.

Agrilus chicomecoatli Fisher. SIN, Topolobampo, 18-VII-63, RLWE.

Agrilus coatlycuei Fisher. GRO, 5 km S Ocotito, 550m, 1-VII-75, homotype H.A. Hespenheide; 7.2 km NW Ocotito, 853 m, 7-VII-87, oak-pine-acacia woodland, RLWE.

Agrilus collaris (Waterhouse). GRO, 38 km W

Iguala, 25-VII-87, RHTC, GHNC. MEX, 3 mi N Valle de Bravo, 30-VI-65, on *Acacia* sp., GHNC.

Agrilus corrugatus (Waterhouse). CHIS, 2 mi NW Pueblo Nuevo, LLU Biol. Sta., 13-VII-65, on *Acacia pennatula*, GHNC. GRO, 6 km E Chilpancingo, 29-VII-62; MICH, Morelia, 6-VII-62, CEAM. SIN, 2 mi w El Palmito, 6600', 18-VIII-74, RLWE.

Agrilus coxalis Waterhouse. CHIS, 2 mi NW Pueblo Nuevo, LLU Biol. Sta., 13-VII-65; 5 mi SE San Cristobal, 5-VII-56, GHNC.

Agrilus crapullelus Thompson. CAMP, 4 mi E Escárcega, 350', 11/12-VII-83, trop. lowland for.; CHIS, 4 mi S Palenque Ruins, 250', (2-4)-VII-83, trop. lowland for., RLWE; Finca Cacahuitz, 19 km NE Bochil, 28-IX-61; OAX, Tehuantepec, 10-VII-66, CEAM; 13 km S Tuxtепéc, 60 m, 26-VI-83; QR, Kohunlich Ruins, 30 mi E Chetumal, 350', 15/16-VII-83, mixed cohune palm for., RLWE. In Mexico, this species seems to have been recorded previously only from TAB and VER; however it is one of the most frequently and widely collected *Agrilus* in Central America.

Agrilus detractus Waterhouse. CHIS, Lagos de Colores, (13-14)-VI-69, CNCI. COL, Armería, 21-VII-53, AMNH. JAL, Playa Pérula, 27-V-82, nivel del mar, UNAM. MICH, 49 mi SE Aquila, 13-VII-84, TAMU. OAX, Juchitán, 24-IX-61, CEAM; 3 mi W Tehuantepec, 2-VIII-65, GHNC. PUE, 13 mi SE Acatlán, 25-VIII-64, DSVC. SIN, 5 mi N Mazatlán, 10-VIII-65, on *Acacia* sp., GHNC; 5 mi SW Soquitlán, 30-VI-82, CDAE, RLWE. SON, 2 mi E Alamos, 22-VIII-59, RLWE; 55 km SW Moctezuma, 1066m, 23-VII-80, GHNC. This species, which seems to be widespread and common, has been known only from GRO.

Agrilus discoidalis Waterhouse. TAMPS, road to Ocampo, 9.3 mi w hwy. 101, 31-V-82, GHNC.

Agrilus divaricatus Waterhouse. JAL, 21 mi S Guadalajara, 19-VII-66, on *Mimosa* sp., DSVC, GHNC; 20 mi NW Magdalena, 9-IX-70; ZAC, 39.7 km S Juchipala 1524m, 6-VIII-88, acacia thorn scrub, RLWE.

Agrilus emarginatus (Waterhouse). JAL, 17 mi N Puerto Vallarta, 15-VII-82; MOR, 4.4 mi E Cuernavaca, (6-8)-VII-74; OAX, Temescal, 5-VII-65; SIN, 7 mi E San Blás, 6-VII-82, GHNC. TAMPS, Río Frío, NE Gómez Farías, 5-VI-83, RLWE.

Agrilus flohri (Waterhouse). SIN, 20 mi E Villa Unión, 10-VIII-64; 3.5 mi W Concordia, 29-VII-72, GHNC.

Agrilus fosseicollis Thomson. CHIS, Chiapa de Corzo, 4-VIII-69, GHNC; Rte. 195, ca. 30 km S jct. Rte. 190, 930m, 14-I-79, oak-pine for., RLWE.

Agrilus fossulatus Waterhouse. JAL, arroyo N Ajijic, 5250', 30-VI-64, GHNC.

Agrilus funestus Gory. CHIS, 2 mi NW Pueblo Nuevo, LLU Biol. Sta., 12-VII-65, on *Acacia* sp.; 5 mi S Palenque, 25-VII-80; MEX, 3 mi N Valle de Bravo, 29-VI-65, on *Mimosa* sp., GHNC. SLP, 79.5 km N Tamazunchale, 5-VI-87, RLWE.

Agrilus furcillatus Chevrolat. CHIS, Cerro Juárez, Ocozocoautla, 25-VI-76, 700m, MCMC; Tuxtla Gutierrez, 19-IX-49, 700m, UNAM; 4 mi NW Pueblo Nuevo, river bajada, 30-VII-65, GHNC. COL, VIII-16, UNAM. JAL, 17 mi N Puerto Vallarta, 15-VII-82, CDAE, RLWE; near Chapala, 10-VIII-76, CIAN, RLWE; near Tamazula, 27-VII-56, GHNC. MEX, Temescaltepéc, 11-IX-79, trampa de luz, CEAM; 3 mi N Valle de Bravo, 28-VI-65, GHNC. PUE, Atlixco, 9-VII-78, RLWE.

Agrilus hilaris Waterhouse. CHIS, 4 mi S Palenque Ruins, 250', (2-4)-VII-83, trop. lowland for., RLWE. Hespenheide (1979) provided the only prior record from Mexico (OAX).

Agrilus impexus Horn. GRO, Petaquillas, 6-VII-63, CEAM; 3.5 mi S Río Balsas at hwy. 95, 17-VIII-70; 9.7 km E Xochipala, 1036 m, 5-VII-87, acacia-cactus woodland; 3.2 km N Cacahuamilpa, 1585 m, 4-VII-87, acacia woodland; MICH, 33 km NE Arteaga, 980m, 10-XI-76; MOR, 11 mi NW Cocoyoc, 4500', 14-VIII-74, RLWE; Progreso, 28-V-61, CEAM. PUE, 6 mi SE Petlalcingo, 5300', 13-VIII-74; 3 mi SE Acatlán, 3800', 1-VI-74; SON, 2 mi E Alamos, 24-VIII-59, RLWE; San Carlos, 16-VII-83, malaise trap, CDAE.

Agrilus inclinatus Waterhouse. CHIS, Simojovel, 28-IX-61, CEAM.

Agrilus ixcuinae Fisher. GRO, 18 mi W Iguala, 21-VIII-81, GHNC; 10.7 km SW Xochipala, 1753 m, 5-VII-87, acacia-oak woodland, RLWE; Petaquillas, 6-VII-63, CEAM; JAL, 28.4 km S Chamela, 16-VII-87, GHNC. MICH, Morelia, 6-VII-62, CEAM. MOR, 10 mi E Cuernavaca, 9-VII-74, GHNC. NAY,

2 mi NE San Blás, 21-VII-63; PUE, 10.1 km N Tehuacán, 1798 m, 21-VII-87, acacia scrub, RLWE. SIN, Carr. 15, km 1099, 4-VI-62, CEAM.

Agrilus latifrons Waterhouse. JAL, Est. Biología Chamela, 26-VIII-80, 80m, CEAM; 10-X-88, RLWE; 15 mi NE Guadalajara, 17-IX-70; 18 mi N Barra de Navidad, 23-VIII-76, EMUS.

Agrilus luctator Kerremans. CHIS, 3 mi NW Pueblo Nuevo, 15-VII-65, GHNC. COL, Armería, 10-VIII-62; GTO, El Chico, 5-VI-62; GRO, Presa de Chilpancingo, 30-VII-62, CEAM; Iguala, 17-VIII-81, GHNC. MOR, Cuautla, 5-VII-61; OAX, Juchitán, 24-IX-61, CEAM; 3 mi W Tehuantepec, 2-VIII-65, on *Acacia pennatula*; 18 mi E La Ventosa Jct., hwy. 190, 21-VII-65, on *A. pennatula*; SIN, 5 mi N Mazatlán, 9-VIII-65, on *Acacia* sp., GHNC; Carr. 15, km 1099, 4-VI-62; San Blás, 28-VII-57, CEAM; 5.3 mi SW Soquitlán, 30-VI-82, CDAE, RLWE. SON, 30 mi S Navojoa, 20-VI-82, GHNC.

Agrilus major Waterhouse. MOR, Tlayacapan, 1680m, 18-X-80, on bark of legume, RLWE.

Agrilus marginatus Waterhouse. JAL, 5.5 mi NE Tecolotlán, 13-VII-82; SIN, 38 mi NE Concordia, near Loberus, 3-VII-82, GHNC.

Agrilus mecoatl Fisher. MOR, 4.4 mi E Cuernavaca, (6-8)-VII-74; NAY, Jesus María, 6-VII-55, GHNC; 20 mi SE Ixtlán del Río, 22-VII-63, RLWE.

Agrilus megerlei Fisher. GTO, 3 mi S Valle de Santiago, 16-VII-74, GHNC.

Agrilus montezuma Fisher. OAX, Oaxaca, 6-VII-70, GHNC.

Agrilus mutabilis Waterhouse. CHIS, 3 mi NW Pueblo Nuevo, 16-VII-65, on *Acacia pennatula*, GHNC. GRO, 10.7 km SW Xochipala, 1753 m, 5-VII-87, acacia-oak woodland, RLWE; 6 km E Chilpancingo, 29-VII-62; Petaquillas, 6-VII-63, CEAM. MEX, 3 mi N Valle de Bravo, 20-VI-65, on *Acacia* sp.; MICH, hwy. 15, 5 mi S Tuxpan, 9-VII-72, on *Acacia* sp., GHNC; Carapan, 10-VII-81; 3 km N Gabriel Zamora, 12-VII-81; NAY, 33 km SE Tepic, 1130m, 27-VI-75, RLWE.

Agrilus napatecutli Fisher. CHIS, Tuxtla Gutierrez, 25-X-61, CEAM. OAX, 20 mi E

Tehuantepec, 16-VIII-64; 43 km W Salina Cruz, 91 m, 14-VII-87, acacia thorn scrub, RLWE.

Agrilus nodifrons Waterhouse. COL, 8 mi S Colima, 10-VII-82, GHNC. JAL, Est. Biol. Chameala, 12-X-82, UNAM. NAY, 4 mi NE Las Varas, 14-VII-82, GHNC. PUE, Atlixco, Cerro Tilcuayo, 2200m, 17-VII-78; SIN, 34 mi E Villa Union, 28-VIII-60, RLWE.

Agrilus oculatus Waterhouse. COL, 12 mi SW Colima, 1600', 3-VIII-71, RLWE. JAL, 23 mi S Guadalajara, 3-VIII-62, DSVC, GHNC. MEX, Tonatico, 13-VII-61, CEAM. OAX, Ruinas de Monte Albán, 11-VII-56; PUE, 34 mi S Atlixco, 27-VI-57; SIN, 1 mi S Pericos, 11-VI-54, GHNC.

Agrilus ometauhtli Fisher. HGO, 4 mi N Zimapán, 6700', 26-VII-82, RLWE.

Agrilus opacipennis Waterhouse. MEX, 3 mi N Valle de Bravo, 29/30-VI-65, on *Acacia* sp., GHNC.

Agrilus parvusculus Obenberger. SLP, Taman, 20 km SW Tamazunchale, 11-VI-83, RLWE. TAMPS, summit above Hulilo, 1767m, 25/26-III-80, GHNC.

Agrilus pectoralis Waterhouse. SLP, 33.8 km N Entronque El Huizache, 2-VI-87, "mesquite chaparral," RLWE. SIN, 10 mi N Los Mochis, along Río Fuerte, 29-VI-82, CDAE. This species, formerly known as *A. palmacollis* Horn (Hespenheide, 1983a), is common and widespread in the SW U.S., and in Baja California. Elsewhere in Mexico it has been known only from COAH and SON.

Agrilus percarus Kerremans. OAX, 10 mi N Miltepéc, 26-VII-74, GHNC; 8 mi SW Tuxtepéc, 200', 26-VI-83, trop. lowland for., RLWE.

Agrilus perlucidus Gory. DF, San Gerónimo Pedregal, 18-IX-50; MEX, 3 mi N Valle de Bravo, 28/29-VI-65, GHNC; Villa Guerrero, 13-VIII-61, CEAM. NAY, Arroyo Santiago, near Jesús María, 5-VII-55, GHNC.

Agrilus pilosus Waterhouse. OAX, 10.6 km N Jct. hwys. 190/135, 1920m, 21-VII-87, wet oak for., RLWE.

Agrilus prodigiosus Fisher. GRO, 7.2 km NW El Ocotito, 853 m, 7-VII-87, oak-pine-acacia woodland, RLWE. JAL, 38.8 mi S Puerto Vallarta,

9-VII-82, CDAE, RLWE; 6 mi NE El Rincón, HWY. 80, 3-VIII-71; MICH, Barranca Hondo, 19 mi S Uruapan, 3000', 5-VII-70, RLWE.

Agrilus prosopidis Fisher. NL, 0.5 mi NW Santiago, 8-III-73, RLWE.

Agrilus proximulus Fisher. CHIS, 24 mi NW Comitán, 2165 m, 31-VII-74, RLWE. GRO, Chilapa, 30-VII-62, GHNC; 10.3 km NE Iguala, 1280 m, 5-VII-87, acacia woodland, RLWE. MICH, Morelia, 6-VII-62, CEAM; hwy. 15, 5 mi S Tuxpan, 7-VIII-65, GHNC; Barranca Hondo, 19 mi S Uruapan, 915m, 5-VII-70, RLWE.

Agrilus quadricostatus Waterhouse. NL, 9 mi W Iturbide, 3-VII-74, GHNC.

Agrilus quadrinotatus Gory. MEX, 3 mi N Valle de Bravo, 28/29-VI-65, GHNC. NAY, 2.5 mi N Compostela, 20-VII-63, RLWE.

Agrilus quercus Schaeffer. GRO, 10.7 km SW Xochipala, 1753 m, 5-VII-87, oak-acacia woodland; OAX, 10.8 km N Jct. hwys. 175/195, 1859 m, 19-VII-87, acacia-oak woodland, RLWE. The only other record of this species from Mexico was provided by Nelson (1987).

Agrilus quetzalcoatl Fisher. CHIS, 8 mi W Parque Nac. Montebello, 31-VII-74, RLWE; 2 mi NW Pueblo Nuevo, LLU Biol. Sta., (12-25)-VII-65, on *Acacia pennatula*; OAX, 18 mi E La Ventosa Jct., hwy. 190, 21-VII-65, GHNC; 20 mi E Tehuantepec, 16-VIII-64, RLWE; Juchitán, 24-IX-61, CEAM.

Agrilus ruginosus (Waterhouse). JAL, 21.7 mi S Puerto Vallarta, 9-VII-55; 4 mi N Tequila, 18-VII-66, on yellow composite; NAY, La Mesa de Nayarit, 21-VII-82; SIN, 33 mi E Villa Union, 23-VII-65, GHNC.

Agrilus sallei Duges. JAL, hwy. 15, 60 mi S Guadalajara, 8-VIII-65, GHNC; 4.5 km ENE Cajitilán, 1525 m, 17-X-88, on leaves of 2.5 m malvaceous plant by roadside; MICH, 7 mi NE Sahuayo, 5100', 12-VIII-82, RLWE. SIN, 7 mi S Culiacán, 23-VIII-60, GHNC.

Agrilus scabrosus Waterhouse. GRO, 5 km S Ocotito, 550m, 1-VII-75, RLWE. MICH, hwy. 15, 5 mi S Tuxpan, 7-VIII-65, GHNC. NAY, 7 mi E San Blás, 17-VII-82; 22 mi NW Tepic, 17-VII-82, CDAE,

GHNC, RLWE. OAX, 23 mi E Zanatepéc, 1600', 3-VI-74, RLWE; La Ventosa, 72 mi E Oaxaca, 21-VII-68; PUE, 12.5 mi N Izucar de Matamoros, 5000', 27-VI-68, GHNC.

Agrilus simulans Waterhouse. VER, Fortín-Sumidero, Pl. Cerveceria, Ing. Daniel Rábago Res., 2500-3000', (20-23)-V-65, GHNC.

Agrilus sparsus Waterhouse. CHIS, 3 mi NW Pueblo Nuevo, 16-VII-65, on *Acacia pennatula*, GHNC.

Agrilus speciosus Waterhouse. MEX, 3 mi N Valle de Bravo, 30-VI-65, on *Acacia* sp., GHNC. OAX, 12 mi SE El Cameron, 3600', 12-VIII-74, RLWE.

Agrilus squaliformis Thomson. CHIS, Simojovel, (18-31)-VII-58, GHNC.

Agrilus squalus Waterhouse. QR, Kohunlich Ruins, 30 mi E Chetumal, 350', 15/16-VII-83, mixed cohune palm for., RLWE. YUC, 14 mi E Chichen Itzá, 30-VII-80, GHNC.

Agrilus squamulatus Waterhouse. CHIS, 35 mi E San Cristobal, 26-VII-57, on *Colubrina ferruginea*, GHNC.

Agrilus stellatus Waterhouse. CHIS, 16.4 mi E Tapanatepec on road 190, 12-VII-62, GHNC.

Agrilus sulcatus Chevrolat. DF, Eslava, IX-53; Tepepan, 22-IX-68, MCMC. JAL, 36 mi N Cd. Guzmán, 5-IX-66, GHNC. MEX, Chapingo, 14-VIII-80, 2240m; Cerro de Nezahualcoyotl, Texcoco, 1-X-62, CEAM. MICH, Pátzcuaro, 1-IX-38, GHNC; 8.3 km N El Puerto (rd. jct to Cotija), 1700 m, 16-X-88, RLWE. MOR, Tepoztlán, 16-IX-71, UNAM; Jojutla, 23-X-77, UAEM; Yautepec, 16-X-82, CEAM. PUE, "Puebla Ant. Col. Mus. Histo. Nat. 914", UNAM. OAX, Oaxaca, 20-VII-37, GHNC. QRO, Peña Blanca, 11-VIII-79, CEAM.

Agrilus tacitus Kerremans. VER, hwy. 150, 2 mi E Cuitlahuac, 3-VII-65, on *Mimosa* sp., GHNC; Huatusco, 23-VII-65, CEAM.

Agrilus tejupilcoensis Fisher. OAX, Temescal, 6-VII-65, GHNC.

Agrilus telpuchtli Fisher. GRO, Chilapa, 30-VII-62, CEAM.

Agrilus tiacapanae Fisher. MICH, hwy, 15, 5 mi S Tuxpan, 9-VII-72, on *Acacia* sp., GHNC

Agrilus tlaculteutlae Fisher. CHIS, 2 mi NW Pueblo Nuevo, LLU Biol. Sta., 12-VII-65, on *Acacia pennatula*, GHNC. GRO, 5 km S Ocotito, 550m, 1-VII-75, RLWE.

Agrilus toteci Fisher. GRO, 3.2 km N Cacahuamilpa, 1585 m, 4-VII-87, acacia woodland, RLWE. PUE, 15 km WNW Izucar de Matamoros, 1300m, 6-XI-76, 16-X-86, RLWE.

Agrilus toxotes Obenberger. JAL, 27.4 km S Chamela, 16-VII-87, GHNC.

Agrilus umactli Fisher. OAX, 3 mi W Tehuantepec, 9-VII-65, on *Cercidium plurifoliatum*, GHNC.

Agrilus velutinomaculatus Waterhouse. OAX, Temescal, 5-VII-65, GHNC.

Agrilus vermiculatus (Waterhouse). MOR, 10 mi E Cuernavaca, 8-VII-74, GHNC; Cañon de Lobos, km 19 E Cuernavaca, 1220m, 15-X-86; OAX, hwy. 175, 3 mi N Ixtlán de Juárez, 2300m, 26-VIII-82, RLWE.

Agrilus xanthonotus Waterhouse. CHIS, Tuxtla Gutierrez, 27-IX-61, CEAM. GRO, 33 km W La Unión, 30-VI-75, RLWE. JAL, 20 mi SW Autilán, 13-VII-82; NAY, 6 mi E San Blás, 27-VII-66, GHNC; 20 mi SE Ixtlán del Río, 22-VII-63, RLWE.

Agrilus xiuhotecutli Fisher. GRO, 3.2 km N Cacahuamilpa, 1585m, 4-VII-87, acacia woodland, RLWE.

Anthaxia (Agrilaxia) fasciata Waterhouse. JAL, 17.6 km N Chamela, 18-VII-87; OAX, 3 mi W Tehuantepec, 19-VII-65, on *Cnidoscolus urens*; QRO, 32 km SW Xilitla, 5700', 3-VII-87, GHNC. This species was described from "Presidio (Forrer)" and Acapulco, GRO. Cobos (1971) incorrectly recorded Presidio as in DGO. According to Selander and Vaurie (1962) this locality is near Mazatlán, SIN; a confirming record for that state is 5 mi N Mazatlán, 18-VII-72, GHNC.

Anthaxia (Agrilaxia) flavimana Gory. HGO, 10 mi N Zimapán, 6300', 18-VIII-71, GHNC. OAX, 20.5 mi NW Oaxaca, 5500', 6-VIII-83, dry oak savannah; QRO, 19.9 mi W Xilitla, 5000', 12-VI-82,

dry oak for., RLWE. This species is common and widespread in the U.S. Apparently the only specific Mexican record (Mexico City) in the literature was given by Cobos (1971).

Buprestis biplagiata Waterhouse. This species was described from SLP, apparently from a single specimen. Duges (1891) redescribed it, again from SLP. We have examined 2 specimens from the Duges Collection (UNAM) labelled "San Luis Potosí/894. D-1350" and concur that they are *B. biplagiata*.

Buprestis ventralis Waterhouse. This species has been known only by the type from "Mexico". Four specimens were available to us for study, one of which was compared to a slide of the type (BMNH), and agree well with the original description. *B. ventralis* bears superficial resemblance to *B. aurulenta* L. and *B. striata* F., but is more related to and closely resembles *B. biplagiata*. A distinguishing character, not mentioned by Waterhouse (1882), is the humpbacked appearance of *B. ventralis* when viewed from the side. DF, VII-50 & 14-IX-51, UNAM, RLWE. MEX, Apipilhuasco, 9-VIII-75, *Pinus montezumae*, CEAM; Parque Zoquiapan, 3200m, 10-XII-79, on stump recently broken *Pinus hartwegii*, RLWE.

Chalcangium longipenne Waterhouse. This unusual species has been known only by the type from "Mexico, Puebla". A specific record is PUE, 7 mi NW Tehuitzingo, 4000', 1-IX-70, GHNC.

Chrysobothris acaciae Knull. SLP, 33.8 km N Entronque El Huizache, 2-VI-87, "mesquite chaparral"; 11.6 km E San Luis Potosí, 1945 m, 3-VII-87, acacia-cactus scrub; TAMPS, 14 mi NE Tula, hwy. 101, 5350', 23-VII-82, RLWE. ZAC, 22 mi NE Zacatecas, 10-VII-87, on *Acacia constricta* and *A. farnesiana*, CLBC.

Chrysobothris aequalis Waterhouse. QR, X-can Nuevo, (IV-VII)-66/67; YUC, Mpo. Tinum, Piste, (IV-IX)-67/68, CHAH, GHNC, RLWE.

Chrysobothris aerea Chevrolat. SIN, 38 mi NE Concordia, nr. Loberas, 3-VII-82, GHNC.

Chrysobothris analis LeConte. This common euryphagous beetle has been recorded from the SW U.S. to Guatemala, but not from: HGO, Jacala, 4500', 25-VI-39, R. Haag, MCZC. JAL, Est. Biol. Chamela, 5-VII, 14/18-X-85, reared from *Coccoloba*

liebmanni collected 8-II, emerged 1-VII-85, UNAM. NL, 44 mi S Allende, 28-VI-64, on *Prosopis* sp.; PUE, 1 mi N Coxcatlán, 28-VII-73, DSVC.

Chrysobothris astuta Waterhouse. QR, X-can Nuevo, (IV-VII)-66/67; YUC, Mpo. Tinum, Piste, (IV-IX)-67/68, CHAH, GHNC, RLWE.

Chrysobothris basalis LeConte. MOR, Tetecala, 20-VII-47, UNAM. ZAC, 39.7 km S Juchipala 1524m, 6-VIII-88, acacia thorn scrub, RLWE.

Chrysobothris capitata Gory and Laporte. CHIS, Simojovel, (1-16)-VIII-58, GHNC; 4 mi S Palenque Ruins, 2-VII/30-VII-83, trop. lowland for., RLWE. MICH, Zirimicuaro, 2-XI-80, 1350m, criado de rama de *Inga* sp., S-153, CEAM. QR, X-can Nuevo, VI-67, CHAH, GHNC, RLWE. SLP, El Salto, 27-IX-50, UNAM. TAB, Cárdenas, 2-V/30-VI-83, CEAM; 34 mi W Cárdenas, 30-VII-70, RLWE.

Chrysobothris costifrons costifrons Waterhouse. The species group to which this beetle belongs was revised by Westcott (1983), who recorded it from various Mexican states, including a questionable record from SIN. A confirming record for that state is 20 km E Villa Unión, 30-VII-80, CLBC.

Chrysobothris costifrons rubiterga Westcott. MOR, Sta María, 30-V-80, UAEM.

Chrysobothris distincta Gory. CHIS, 19 km S La Trinitaria, 20-X-88; 2.5 km W Cinco Cerros, 22-X-88, RHTC. JAL, hwy. 15, 60 mi S Guadalajara, 8-VIII-65; MEX, 3 mi N Valle de Bravo, 29-VI-65, on *Acacia* sp., GHNC; Tonatico, 30-IX-78, UAEM. MICH, 5 mi S Tuxpan, hwy. 15, 7-VIII-65, on *Acacia* sp., GHNC; Cotija, 30-XII-69, RLWE; Lombardía, 780m, 1-XI-80, CEAM. Specimens were collected on a large, recently fallen *Erythrina* sp. in MOR, Cañon de Lobos, 1220m, 15-X-86, RLWE (not a new state record). Knull (1949) accepted the occurrence of this species in the U.S. on the basis of specimens labelled "Cal." and Barr (1988) followed; however, since we have not seen it from north of JAL in Mexico, it should be stricken from the U.S. list.

Chrysobothris explicationis Nelson. COL, 8 mi NW Armería, 7-VII-87, *Acacia* sp., CLBC.

Chrysobothris gemmata LeConte. Based only on the literature, there is reason to question

"Sonora, Mexico" as the type locality for this species. Otherwise, it has not been recorded from Mexico, although there has been no reason to doubt its occurrence there. One of us (RLW) has examined a male and a female from southern SON, 15 mi E Navojoa, 30-VII-65, DSVC; Alamos, 20-VIII-59, RLWE. Both differ from the southern Arizona population by having the ground color of the upper surface dark blue-green rather than purple.

Chrysobothris ichthyomorpha Thomson. CHIS, San Jeronimo Tacana, 12-X-70, GHNC.

Chrysobothris melazona Chevrolat. QR, X-can Nuevo, VI-67; YUC, Mpo. Tinum, Piste, V-68, CHAH, RLWE.

Chrysobothris merkelii Horn. JAL, Chamela, 7-VIII-75, USNM. MICH, Nueva Italia, 16-VI-87, BKDC. MOR, Tlayacapan, 18-X-80, CEAM. These represent the southernmost recorded distributions of this species, which has been known from the SW U.S., BCN, BCS, CHIH and SON. The southern specimens are smoother, shinier, and with distinct brassy reflections.

Chrysobothris multistigmosa (Mannerheim). MEX, Malinalco, 19-IX-41, UNAM; Zoquiapan, 3-XI-83, UACH. This species is widely distributed in Mexico (Nelson, 1975). It was recorded from GTO by Duges (1891) and we have verified this identification from 2 specimens as follows: "col E. Duges, 901 D-26", UNAM. The following represents a new host record: MICH, Zirimícuaro, 2-XI-80, 1350m, criado de rama de *Inga* sp., S-153, CEAM. A major character used by Nelson (1975) to separate *C. multistigmosa* and *C. basalis* from their close relatives is the shape of the male's third antennal segment, which was said to be broadly triangular in those two species and elongate in the others. At least *C. multistigmosa* can be dimorphic in this character, as one of us (RLW) examined a specimen (MOR, Oaxtepéc, 31-VII-47, UNAM) on which the segment is rather narrowly elongate, 2.5X as long as wide. Fortunately, the male genitalia are diagnostic for this species.

Chrysobothris nausicaa Thomson. NAY, 11 mi N Tepic, 19-VII-63, RLWE.

Chrysobothris paratabalipa Nelson. JAL, Barra de Navidad, 20-VIII-67, CIAN. PUE, Acatlán, 22-XII-77, CEAM. Nelson (1975) recorded this species from "Mexico"; a confirming record for that state is

Tejupilco, 17-XII-73, 1180m, *Pithecellobium dulce*, MCMC.

Chrysobothris rossi Van Dyke. SON, 30 mi S Navojoa, 29-VI-82, CDAE; Caborca, 30-VI-76, CIAN.

Chrysobothris sallei Waterhouse. CHIS, 4 mi S Palenque Ruins, 250', (2-4)-VII-83, trop. lowland for., RLWE. OAX, Uxpanapa, 21-V-81, 140m, criado de *Dialium guianense*, S-262, CEAM. QR, X-can Nuevo, (IV-VI)-67, CHAH, GHNC, RLWE. TAB, Huimanguillo, 10-VII-82, CEAM.

Chrysobothris storkani Obenberger. PUE, km 142, Villa Avila, Camacho, 4-XI-77, UNAM.

Chrysobothris trisignata Waterhouse. CHIS, Huixtla, XI-39, UNAM; Ocósingo, 1200m, 6-IX-47, "bosque primitivo," RLWE. JAL, mts. N Ajijic, 20-IX-64; MEX, 6 mi NW Valle de Bravo, 21-VII-66, GHNC. MICH, 22 mi SE Huetamo, 9-VII-70; 7 mi S Tuxpan, 23-VII-66, RLWE. MOR, Coatlán del Río, 1-VI-47, UNAM.

Colobogaster aureoviridis Fisher. GRO, Cacahuamilpa, 4-X-42, RLWE. MEX, Malinalco, 1780m, VIII-46, UNAM. MOR, Mercado, 24-VIII-78, UAEM; Cuautla, 25-III-79, RLWE.

Colobogaster puncticollis Waterhouse. This species has been known only by the original material described by Waterhouse (1887) from Orizaba, VER, and Nicaragua. The following specimen was compared to the type (BMNH) by S.G. Wellso and found to closely match it: GRO, Colotlipa, 26-VI-46, UNAM.

Cyphothorax paleolatus (Chevrolat). CAMP, 10 km W Xpujil, Chicana, 300 m, (12-14)-VII-83, RLWE.

Dicerca aeneovaria Waterhouse. VER, Veracruz, "Ant. Col. Mus. Hist. Nat. 892", UNAM. This is not a new state record; however, the only other known specimens were discussed by Waterhouse (1882, 1889), from Mexico City and Jalapa, VER.

Dicerca inconspicua Waterhouse. DF, San Bernabe, 18-X-36, MCMC; HGO, Ixmiquilpan, 18-XI-82, CEAM.

Dismorpha costifera (Waterhouse). DF,

Tacubaya, VII-31, MCMC. CAMP, 31.5 mi N Hopelchen, 1-VIII-80; MICH, 10.6 mi S Uruapan, 8-VIII-78; OAX, 3 mi W Tehuantepec, 19-VII-65, on *Cordia curassavica*, GHNC.

Euchroma gigantea (L.). This well known species (Hespenheide 1983b) is reputed to be common from Mexico to South America; however, in the readily available literature we could find mention of it in Mexico only from CHIS, TAB, VER and YUC. Undoubtedly there are reports of this huge buprestid even in popular works. CAMP, Escárcega, 3-IV-65, trampa de luz, INIF. GRO, Teloloapan, 4-XII-27, UNAM. MOR, Cuernavaca, 18-IV-81, CEAM; OAX, 13 mi S Matatlán, 4300', 8-VIII-67; SON, Aduana, 5 mi S Alamos, (1-2)-VIII-53; Rcho. Guiracoba, 6-II-50, LACM. The records from SON provide a notable range extension and strongly suggest that *E. gigantea* may be found wherever its host plants (trees in the family Bombacaceae) occur.

Hiperantha interrogationis (Klug). DF, Jaconpagua, 17-I-48, UNAM. MICH, 13 km N Cuatro Caminos, 300m, 29-VI-75, DSVC, RLWE. NAY, San Blás, 600m, 18-VII-52, UNAM. Hoscheck and Thery (1928) recorded this species from DGO, GRO, and VER, but no biological data is recorded for Mexico. Specimens were taken from flowers of *Acacia* sp. in GRO, 3 km W Chilpancingo, (20-27)-VII-87, CLBC. We have seen a large series of the all red form from JAL, Est. Biol. Chamela, (24-29)-VII-86, where according to F. Noguera (pers. comm., RLW) it is common on flowers of *Acacia angustissima*.

Hylaeogena astraea (Waterhouse). CHIS, 4 mi NW Pueblo Nuevo, river bajada, 30-VII-65, GHNC.

Hylaeogena thoracica (Waterhouse). MOR, Cañon de Lobos, 3-IX-79, CEAM. Only a questionable record for Mexico exists in the literature (Waterhouse, 1889).

Leiopleura puncticeps Waterhouse. VER, Los Tuxtlas Biol. Sta., ca. 20 mi E Catemaco, 100', (1-2)-VIII-83, trop. lowland for., RLWE.

Lius mexicanus Fisher. CHIS, 3 mi NW Pueblo Nuevo, 27-VII-65; GRO, hwy. 95, 6 mi S Río Mexcala, 5-VIII-65, GHNC. MICH, Tacámbaro, 30-V-63, CEAM.

Mixochloris lateralis Waterhouse. CHIS, 3 mi

NW Pueblo Nuevo, 25-VII-65, on *Ternstroemia tepezapote*, GHNC, RLWE. This species has been known only by the type from Orizaba, VER.

Omochyseus terminalis Waterhouse. MOR, Cañon de Lobos, 3-IX-79, CEAM.

Pachyschelus communis Waterhouse. CHIS, Simojovel, 28-IX-61, CEAM.

Pachyschelus secedens Waterhouse. CHIS, 3 mi NW Pueblo Nuevo, 24-VII-65; JAL, hwy. 15, 60 mi S Guadalajara, 8-VIII-65; MEX, 3 mi N Valle de Bravo, 20-VI-65; TAMPAS, Bocatoma, 7 km SSE Gómez Farías, (19-23)-V-79, GHNC.

Psiloptera auropunctata Kerremans. Apparently there are no specific locality records in the literature for this species: CHIH, Temoris, 18-VII-68, UCDC, RLWE. JAL, Chapala, 24-VII-56; MICH, Cotija, 26-VII-68, 30-XII-69, RLWE.

Psiloptera chalconota Waterhouse. GRO, 8 km W Chilpancingo, 23-VII-87; 22 km N Taxco, 27-VII-87; 38 km W Iguala, 25-VII-87, RHTC.

Psiloptera dilaticollis Waterhouse. AGS, 5 mi N Rincón de Romos, 6500', 9-VII-82, acacia scrub, RLWE. HGO, Tasquillo, 10-IV-69, UNAM; 15 km NW Ixmiquilpan, 1900m, 13-XI-76, RLWE. QRO, Palo Blanco, 21-I-79, flor de *Maytenus phyllanthoides*, CEAM. ZAC, 20 mi N Zacatecas, 7300', 18-VIII-57, UIMC.

Psiloptera monilis Chevrolat. MOR, 5 mi S Amacuzac, 28-IX-64; OAX, 48 mi E La Ventosa, 21-VII-63; VER, hwy. 145, 8 mi S Tinaja, 6-VII-65, on *Mimosa* sp.; 6 mi N Rinconada, 25-IX-76, GHNC; Catemaco, 6/7-VIII-64, RLWE.

Spectralia costulata (Gory). CHIS, 17 km W Tuxtla Gutierrez, 3300', (1-8)-VII-86, GHNC. Waterhouse (1882) recorded this species from VER, but with no specific locality; we have examined it from Lake Catemaco, 24/25-V-69, GHNC.

Taphrocerus chevrolati Obenberger. MICH, hwy. 15, 5 mi S Tuxpan, 1-VIII-65, GHNC. OAX, Ruinas de Monte Albán, 29-IX-61, CEAM. VER,

jct. hwys. 131 & 140, near Perote, 8200', 20-VIII-82, RLWE.

Taphrocerus costatus Waterhouse. OAX, 26 km W Valle Nacional, 1220m, 25-VI-83, CHAH, RLWE.

Taphrocerus difficilis Obenberger. GRO, El Quemado, Km 389, Carr. México-Acapulco, 7-VII-63, CEAM. JAL, Est. Biol. Chamela, 16-XI-85, UNAM.

Taphrocerus kerremansi Duges. CHIS, 45.7 mi S Palenque on Bonampak road, 300', 24-VII-83, Carex marsh; 17 mi W Parque Nac. Montebello, 4800', 30-VII-74, RLWE; 4 mi S Simojovel, 18-III-53; MICH, 10 mi W Cuatro Caminos, 12-VII-72, GHNC; La Huerta, 28-V-63; MOR, Cuautla, 20-VI-62, CEAM. VER, 6 mi NW Salinas, 23-IV-53, GHNC.

Taphrocerus mexicanus Waterhouse. CHIS, 4 mi S Simojovel, 18-III-53; HGO, 4 mi SW Chapulhucán, 25-V-79; TAMPS, road to Rancho Cielo, 1-3 mi W Gómez Farías, 21-V-79; near Encino, 6 mi W Río Sabinas, 26/27-VIII-85, GHNC.

Taphrocerus orizabae Obenberger. MICH, Morelia, 1-VI-63; MOR, Alta Palmira, 5 km S Cuernavaca, 30-VII-62, CEAM; Cuernavaca, 17-III-59, GHNC.

Taphrocerus psilopterooides Waterhouse. CAMP, 6 km W Escárcega, 110 m, 12-VII-83; CHIS, Palenque, 80 m, (4-6)-VI-83; OAX, 13 km S Tuxtepé, 60 m, 26-VI-83, RLWE; Temescal, 6-VII-65; VER, hwy. 145, 8 mi S Tinaja, 6-VII-65, GHNC; 20 km E Tlanchinol, 13-VI-83, RLWE.

Thrinopyge alacris LeConte. DF, 16-VIII-77, UNAM. HGO, Sta. Clara (ca. Cd. Sahagún), 17-III-81, "alimentandose de follaje de *Dasyliion* sp.", CEAM.

Thrinopyge ambiens (LeConte). ZAC, 9.8 mi NE San Tiburcio, 10-VII-87, in *Dasyliion* sp., CLBC.

Trypanitius infrequens Waterhouse. MICH, Barranca Honda, 19 mi S Uruapan, 3000', 5-VII-70; NAY, 13 mi NW Tepic, 2300', 8-VIII-71, RLWE; El Pichón, 25-VI-63; OAX, 15 mi N La Ventosa Jct., Hwy. 185, 8-VII-65; 3 mi w Tehuantepec, 10-VII-65, on *Cordia curassavica*, GHNC; Salina Cruz, VI-68,

MCMC; 22 mi S Matías Romero, 20-VII-70, RLWE. PUE, 4.4 mi SW Acatepec, 9-VII-81; SIN, 7 mi S Culiacán, 23-VIII-60, DSVC, GHNC, RLWE.

Acknowledgments

We are grateful to the following curators and their institutions, and to individuals, for loaning specimens or providing information pertinent to this study: AMNH, American Museum of Natural History, New York, New York, L.H. Herman, Jr.; AUEM, Auburn University, Alabama, W.E. Clark; BKDC, B.K. Dozier, Chula Vista, California; CASC, California Academy of Sciences, San Francisco, D.H. Kavanaugh; CDAE, California Department of Food and Agriculture, Sacramento, F.G. Andrews; CIAN, Centro de Investigaciones Agrícolas del Noroeste, Cd. Obregón, Sonora, F. Pacheco M.; CISC, University of California, Berkeley, J. Chemsak; CLBC, C.L. Bellamy, Germantown, Maryland; DSVC, D.S. Verity, Los Angeles, California; GIES, E. Giesbert, Los Angeles, California; EMUS, Utah State University, Logan, W.J. Hanson; HAHC, Henry F. Howden, Ottawa, Ontario, Canada; INIF, Instituto Nacional de Investigaciones Forestales, México, D.F., R. Muñiz V.; LACM, County Museum of Natural History, Los Angeles, California, C.L. Hogue; MCMC, Museo de Historia Natural, México, D.F., M.A. Morón R.; RHTC, R.H. Turnbow, Fort Rucker, Alabama; SBC, S. Bily, Prague, Czechoslovakia; SDMC, Museum of Natural History, San Diego, California, D.H. Faulkner; SGWC, S.G. Wellso, W. Lafayette, Indiana; TAMU, Texas A&M University, College Station, H.R. Burke; UACH, Universidad Autónoma, Chapingo, D. Cibrián T.; UAEM, Universidad Autónoma del Estado de Morelos, Cuernavaca, J.C. García M.; UCDC, University of California, Davis, R.O. Schuster; UIMC, University of Idaho, Moscow, F. Merickel; UNAM, Universidad Nacional Autónoma de México, México, D.F., S. Zaragoza C.; USNM, National Museum of Natural History, Washington, D.C., J.M. Kingsolver; and WFBC, W.F. Barr, Moscow, Idaho.

Special thanks go to A.F. Newton, Jr., Field Museum of Natural History, Chicago, for loaning a holotype; S.G. Wellso for comparing specimens to types in the BMNH; and to the following people who have provided many Mexican specimens and/or records for our collections: R.S. Anderson, E.M. Fisher, A.J. Gilbert, F.T. Hovore, C.W. O'Brien, E.G. Riley, P.H. Sullivan, and J.E.

Wappes. This is Florida Agricultural Experiment Station Journal Series No. N-00030.

Literature Cited

- Barr, W.F.** 1988. An overview of the Mexican Buprestidae with a listing of *Chrysobothris* species (Coleoptera). In: Memoria de los simposia nacionales de parasitología forestal. II y III. Sec. Agric. Rec. Hidr. Publ. Esp. 46 ("1985"):69-75.
- Cazier, M.A.** 1951. The Buprestidae of North Central Mexico (Coleoptera). Amer. Mus. Nov. 1526:1-56.
- Chevrolat, A.** 1833-1835. Coleoptères du Mexique, fasc. 1-8, vii + 211 leaves, Strasbourg.
- Cobos, A.** 1971. Ensayo monográfico sobre las *Anthaxia* Eschs. (Coleoptera: Buprestidae) de América. Tercera parte: subgénero *Agrilagsia* Kerremans. Arch. Inst. Aclimatación 16:1-235.
- Cobos, A.** 1980. Ensayo sobre los géneros de la subfamilia Polycestinae (Coleoptera, Buprestidae). Parte I. Eos 54 ("1978"):15-94.
- Cobos, A.** 1981. Ensayo sobre los géneros de la subfamilia Polycestinae (Coleoptera: Buprestidae). Parte II. Eos 55-56 ("1979-1980"):23-94.
- Duges, D.E.** 1891. Descripción de coleópteros indígenas de la familia de los bupréstidos. La Naturaleza, Segunda Serie, 2(1):1-38.
- Hespenheide, H.A.** 1979. Nomenclatural notes on the Agrilinae (Buprestidae): IV. Coleopts. Bull. 33:105-120.
- Hespenheide, H.A.** 1983a. *Euchroma gigantea* (Eucroma, Giant Metallic Ceiba Borer), in *Costa Rican Natural History*, D.H. Janzen, ed. Chicago: University of Chicago Press, p. 719.
- Hespenheide, H.A.** 1983b. Nomenclatural notes on the Buprestidae (Coleoptera). Coleopts. Bull. 37:306.
- Hoscheck, A.B. & A. Thery.** 1928. Monographie der Gattung *Hyperantha* Lac. (Buprestidae). Mitt. Zool. Mus. Hamburg 43:125-154.
- Knoll, J.N.** 1949. New Coleoptera with notes (Elateridae, Buprestidae and Cerambycidae). Ohio Jl. Sci. 49:102-104.
- Nelson, G.H.** 1962. Notes on the Buprestidae: Part III. Bull Brooklyn Entomol. Soc. 52:56-60.
- Nelson, G.H.** 1975. A review of the *basalis* group of the genus *Chrysobothris* (Coleoptera: Buprestidae). Coleopts. Bull. 29:1-30.
- Nelson, G.H.** 1987. Additional notes on the biology and distribution of Buprestidae (Coleoptera) in North America, II. Coleopts. Bull. 41:57-65.
- Nelson, G.H., D.S. Verity, and R.L. Westcott.** 1981. Additional notes on the biology and distribution of Buprestidae (Coleoptera) of North America. Coleopts. Bull. 35:129-151.
- Selander, R.B. & P. Vaurie.** 1962. A gazeteer to accompany the "Insecta" volumes of the "Biología Centrali-Americana." Amer. Mus. Nov. 2099:1-70.
- Van Dyke, E.C.** 1942. Contributions toward a knowledge of the insect fauna of Lower California. No. 3. Coleoptera: Buprestidae. Proc. Calif. Acad. Sci., 4th ser., 24:97-132.
- Vogt, G.B.** 1949. A biologically annotated list of the Buprestidae of the Lower Rio Grande Valley, Texas. Ann. Entomol. Soc. Amer. 42: 191-202.
- Waterhouse, C.O.** 1882-1897. Biología Centrali-Americana, Insecta, Coleoptera, Buprestidae, + suppl. & appendix, 3(1):1-193, 663-667, 9 tabs.
- Westcott, R.L.** 1983. Revision of the *aerea* group of *Chrysobothris* (Coleoptera: Buprestidae). Systematic Ent. 8:339-359.
- Westcott, R.L., W.F. Barr, G.H. Nelson, and D.S. Verity.** 1979. Distributional and biological notes on North and Central American species of *Acmaeodera* (Coleoptera: Buprestidae). Coleopts. Bull. 33:169-181.