

NOTES ON THE DISTRIBUTION, SYNONYMY, AND
BIOLOGY OF BUPRESTIDAE (COLEOPTERA) OF
NORTH AMERICA

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ABSTRACT

The female of *Agrilus sapindi* Knull 1938 is described. *A. mojavei* Knull 1952 is treated as a subspecies of *A. granulatus* (Say) 1823. *A. nodicornis* Fall 1932 is considered a junior synonym of *A. duncani* Knull 1929. New distributional and/or host data are given for 130 species in the following genera: *Paratyndaris*, *Acmaeoderopsis*, *Thrincopyge*, *Agaeocera*, *Hippomelas*, *Nanularia*, *Chalcophora*, *Poecilonota*, *Cinyra*, *Buprestis*, *Melanophila*, *Anthaxia*, *Actenodes*, *Chrysobothris*, *Agrilus*, *Brachys*, and *Taphrocerus*.

As more material has been collected, new information on the biology, distribution, and synonymy of various species of Buprestidae has become available. This adds to our understanding of interfaunal relationships of the United States and Mexico, host plants, and some interspecific relationships.

In this paper the genera are arranged phylogenetically and the species alphabetically under each genus. New larval host records are indicated in boldface letters for specimens either reared from or cut from plants not previously recorded as being a host. Boldface letters are also used to denote new state records in distributional data. For some species new plant associations for adults are recorded even though they may not prove to be larval hosts, and significant extensions of geographical range are recorded though they might not indicate new state records.

Unless otherwise indicated, specimens are in the collector's collection. The abbreviations for collection names follow Arnett and Samuelson (1969). The authors, abbreviated GHN and RLW in this paper, express appreciation to the following individuals and institutions for their help, either in preparing this paper, or in allowing their collections to be included: F. G. Andrews, California Dept. of Food and Agric.; J. H. Baker, Baker, Oregon; W. F. Barr, Univ. of Idaho; R. C. Bechtel, Nevada State Dept. Agric.; F. M. Beer, Corvallis, Oregon; P. J. Clausen, Univ. of Minnesota; N. M. Downie, Lafayette, Indiana; E. M. Fisher, Calif. State Univ. Long Beach; D. Giuliani, Big Pine, California; R. D. Gordon, National Mus. of Nat. Hist.; W. J. Hanson, Utah St. Univ.; R. Heitzman, Independence, Missouri; H. Hespenheide, Univ. of California, Los Angeles; F. T. Hovore, Placerita Can. Nat. Center, Newhall, California; D. H. Kavanaugh, Calif. Acad. Sci.; L. L. Pechuman, Cornell Univ.; B. C. Ratcliff, Univ. of Nebraska; V. Roth, SW. Research Station, Portal, Arizona; L. Russell, Corvallis, Oregon; T. Taylor, Rosemead, California; R. H. Turnbow, Univ. of Georgia; W. H. Tyson, Fresno, California; D. S. Verity, Univ. of California, Los Angeles; J. E. Wappes, Germantown, Tennessee.

Paratyndaris prosopis (Skinner) 1903:237. TEXAS: Bastrop Co., Bastrop St. Park, 11,12-VI-71; 14-VII-75; Medina Co., 1 mi E Natalia, Hwy. 35, 12-VII-75, all GHN, on *Quercus stellata* Wang; Brewster Co., Chisos Mts., Pine Canyon, 5000' 1,2-VII-72, RLW, beaten from dead twigs of *Quercus* sp. The latter record extends the known range of this species about 275 miles westward.

Acmaeoderopsis chisosensis (Knull) 1952:349. This species is known only from the Big Bend area of Texas and no biological information has previously been recorded. TEXAS: Brewster Co., 21 mi S Alpine, 4400', 30-VI-72, RLW; Chisos Mts. Basin, 25-29-VI-63, 24-27-VI-71, GHN, all on *Acacia constricta* Benth.

Acmaeoderopsis hualpaiana (Knull) 1952:349. This species was described from several localities in Arizona and the Colorado Desert of California without ecological data. It has since been collected a number of times in the latter area, always on *Prosopis juliflora* (SW.) DC. We have taken it most commonly flying to plants growing in isolated sandy areas during late morning and early afternoon hours, when temperatures are about 80-85°F, the skies clear, and the wind warm.

Acmaeoderopsis hulli (Knull) 1928:315. This species has been recorded as collected on acacia and *Celtis pallida* Torr. TEXAS: King Co., 12 mi W Guthrie, emerged 6-VIII-69, K. Polk, reared from *Prosopis glandulosa* (Torr.) sprayed 1967 with 2-4-5-T [TTCC, RLWE]; Jeff Davis Co., Davis Mts., 6000', F. Hovore, emerged from *Quercus* sp., VIII-74 [RLWE] (**New host records**). Also taken in NEW MEXICO: 5 mi W Las Cruces, Hwy. 70, 16-VI-65, GHN, on *Larrea divaricata* Cav.; 15 mi N Rodeo, Peloncillo Mts., 10-VII-69, GHN, on *Mimosa* sp.

Acmaeoderopsis junki (Théry) 1929:112. This species, widespread in the southwestern United States, has been recorded in Mexico only from Chihuahua. SONORA: 2 mi N Santa Ana, 28-VII-57; Alamos, 15/20-VII-58; 22 mi W Alamos, 17-VII-63; 10 mi E Navojua, 14 & 21-VII-58, all collected by RLW; 15 mi E Navojua, 12-VIII-73, D. S. Verity; 3 mi NE San Pedro, on road to Ures, 13-VIII-72, D. S. Verity. SINALOA: 4 & 12 mi NE El Fuerte, 11 & 12-VII-62, E. Sleeper, *et al.* [CSLB, RLWE]. (**New state records**)

Acmaeoderopsis rockefelleri (Cazier) 1951:9. This species was described from material collected in Texas and Mexico. NEW MEXICO: Hidalgo Co., Cienega Lake, 19-VI-64, J. H. Puckle, [RLWE]; 15 mi N Rodeo, 15-VI-65, GHN, all on *Acacia constricta* Benth.; 5 mi W Las Cruces, Hwy. 70, 16-VI-65, GHN, on *Prosopis juliflora* (SW.) DC. (**New state records**)

Thrincopyge alacris LeConte 1858:17. MEXICO, COAHUILA: 18.4 mi S Saltillo, 26-VII-75, T. Taylor (**New state record**). This sample differs from those examined from Texas and Arizona in that the dorsal ground color tends to be more greenish and the pronotum often lacks yellow markings along the anterior and posterior margins.

Thrincopyge ambiens (LeConte) 1854:83. MEXICO, COAHUILA: 18.4 mi S Saltillo, 26-VII-75, T. Taylor. (**New record, Mexico**)

Agaeocera gigas (Laporte & Gory) 1839:2. This Mexican species was reported from Arizona by Fall (1934); however, this record is suspect and probably refers to *A. scintillans* Waterhouse. Otherwise, *A. gigas* has been recorded only as far north as Durango, Mexico (Waterhouse 1889). COLIMA: Armeria, 27-VII-63, RLW, 26-28-VII-56, A. E. Lewis [RLWE, GHNC]; 22 mi SW Armeria, 27-VII-63, RLW. OAXACA: 7 mi NE Juchitan, 18-VII-52, E. E. Gilbert, C. D. MacNeil [GHNC]. MICHOACAN: 29 mi SW Pihuamo, 24 & 29-VII-66, D. S. Verity [RLWE]; 5 & 12 mi SW Tiquicheo, 1400' & 2000', 8 & 9-VII-70, E. Fisher & P. Sullivan [RLWE]; 12 mi S Tzitzio on Hue-tamo Rd. 19° 21' N, 100° 50' W, 10-VII-47, 1050m, T. H. Hubbell [GHNC]. MORELOS: 20 mi SE Cuautla, 13-VII-70, E. Fisher & P. Sullivan [RLWE]. (**New state records**)

Agaeocera scintillans Waterhouse 1882:4. This species has been recorded from Texas, Arizona and the Mexican states of Sonora and Sinaloa. The latter 2 were given by Van Dyke (1945), but without specific data. We have seen numerous examples from north of Hermosillo, Sonora to Culiacan, Sinaloa. CHIHUAHUA: Santo Nino, 26-VII & 10-VII-68, Sears, Gardner, Glaser [UCDC]; Sierra Madre Mts., La Bufa,

3000', 8-VII-72, Derham Giuliani [CASC]. NAYARIT: 110 mi N Tepic, 19-VII-63, RLW, Jesus Maria, 6,27-VII-55, B. Malkin [GHNC]. (**New state records**)

Hippomelas (Gyascutus) fulgida Barr 1969:321. This species was described from specimens collected in southwestern Idaho. OREGON: Malheur Co., Owyhee River, 17 to 17.7 mi SW Owyhee, 29-VII-71, Westcott & Penrose, on *Salix* sp. [RLWE, ODAC]; 15.2 mi SW Owyhee, 17-VII-74, R. L. Penrose, on *Salix* sp. [ODAC] (**New state record**). The former collections were made between 5 and 8 pm. (MDT) when the beetles were found solitary and mating on the upper portions of the willow. No evidence was found to indicate that this plant serves as a larval host. It is doubtful that it does, since a totally unrelated plant, *Atriplex confertifolia* (Torr. & Frem.) Wats., is known to be a host (Barr 1969).

Nanularia (Nanularia) brunneata (Knull) 1947:210. Reared from roots and woody stems of *Eriogonum elongatum* Benth., in CALIFORNIA: San Bernardino Mts., mouth of Deep Creek, E of Hesperia, GHN. (**New host record**)

Chalcophora virginensis (Drury) 1772:66. To our knowledge this widespread eastern species has not previously been specifically recorded from TEXAS: Harris Co., 3 mi SW Westfield, 27 and 28-VI-61, RLW; Harrison Co., Caddo Lake St. Park, 8-VI-71, GHN, on *Pinus* sp.; Montgomery Co., 16-VIII-58, H. R. Burke, dead pine [GHNC]. (**New state record**)

Poecilnota californica Chamberlin 1922:52. Evans (1957) recorded this species only from Washoe Co. in northwestern Nevada. It was taken in northeastern NEVADA: Elko Co., Ruby Mts., Angel Lake Camp, 15-VII-75, J. H. Baker [JHBC, GHNC].

Poecilnota montana Chamberlin 1922:63. MINNESOTA: Koochiching Co., T71, R24, S35, 30-VII-59, R. T. Franklin (**New state record**). This represents a considerable eastward range extension. The specimens are not typical of those seen from more western localities and further collections are needed to more adequately define their relationship.

Cinyra gracilipes (Melsheimer) 1845:145. NEBRASKA: Lancaster Co., Roca, 4-VII-1899 [DEUN] (**New state record**). This represents the westernmost recorded occurrence of this insect.

Cinyra cuprescens Knull 1940:363. One male on *Anisacanthus thurberi* (Torr.), NEW MEXICO: Hidalgo Co., Peloncillo Mts., Granite Gap, 18 mi N Rodeo, 8-VIII-74, GHN. (**New state record**)

Buprestis adjecta (LeConte) 1854:17. MONTANA: Ravalli Co., Darby, Trapper Peak [UIMC]; Darby [DZEC]. (**New state record**)

Buprestis confluenta Say 1823:159. ARKANSAS: 7 mi E Ash Flat, 1-VII-70, R. J. Leudtke [RLWE]. (**New state record**)

Buprestis consularis Gory 1841:120. NEBRASKA: Thomas Co., Halsey, 25-VII-69 [GHNC]; 25-VII-69, R. J. Leudtke [RLWE]. (**New state record**)

Buprestis intricata Casey 1909:118. MONTANA: Glacier Nat'l. Park, Two Medicine, 12-VIII-64, R. H. Ross [RLWE]; Flathead Co., Echo Lake [DZEC]; Bitterroot Nat'l. Forest, VII-65, G. R. Pieper [GHNC]. ARIZONA: Coconino Co., Sitgreaves Nat'l. For., Sandpoint, 2-VI-71, H. A. Pase, on *Pinus ponderosa* Dougl. foliage [GHNC]; near Flagstaff, Ft. Valley Exp. For. Headquarters, 23-VI-59, W. L. Nutting [GHNC]; Mohave Co., Hualapai Mts., 9-VI-41, Ernestine Hall [FMBC]. (**New state records**)

Buprestis langii Mannerheim 1843:237. WYOMING: Wind River, 1-VIII-72, D. Gates [GHNC]. (**New state record**)

Buprestis maculativentris Say 1824:272. NEBRASKA: Sioux Co., War Bonnet Canyon [DEUN] (**New state record**). MONTANA: Custer Co., Miles City, 11-VII-70, R. C. Stephens [CSLB], confirms a single listing by chamberlin (1926).

Buprestis prospera Casey 1909:123. UTAH: Kane Co., Coral Pink Sand Dunes, 1-VII-67, RLW (**New state record**). ARIZONA: Coconino Co., N. Rim Grand Canyon, 14-VI-61, Fred G. Andrews [RLWE]; Flagstaff, 8-VII-41, R. H. Beamer [GHNC]; Gila Co., Sierra Ancha Mts., VII, D. K. Duncan [GHNC]. This species was synonymized with *B. aurulenta* L. by Helfer (1941), but Knull (1947) considered it a valid

species. We accept the latter position. Certainly, much more material is needed for study.

Buprestis rufipes Olivier 1790:16. ALABAMA: Auburn, 9-VIII-58, H. G. Good [GHNC]; Alex City, 26-VI-58, trap light [GHNC]. (**New state record**)

Buprestis subornata (LeConte) 1860 (1859):208. NEBRASKA: Sioux Co., Glen, 4000', 10-VIII-06, R. H. Wolcott, on *Pinus* sp. [DEUN]; Thomas Co., Halsey, 30-VII-69 [GHNC]. (**New state record**)

Melanophila (*Phaenops*) *californica* Van Dyke 1918:54. Collected on pine in NEVADA: Douglas Co., 5 mi E Stateline, 25-VI-68, RLW; Washoe Co., Galena Creek, 6000', 30-VI-67, R. C. Bechtel, D. L. Horton [NSDA]. (**New state record**)

Melanophila (*Phaenops*) *drummondi* (Kirby) 1837:159. CALIFORNIA: Riverside Co., Banning, 21-XI-74, E. Reeves & G. Foster, reared from *Cedrus deodara* Loud. [CDAE, RLWE]. (**New host record**)

Melanophila (*Phaenops*) *gentilis* Le Conte 1863:42. Another wide-ranging, common western species. NEBRASKA: Sioux Co.: Monroe Canyon, 22-VI, R. H. Wolcott [DEUN]; Pine Ridge, VII [DEUN]; these confirm the record listed by Chamberlin (1926).

Melanophila (*Phaenops*) *intrusa* Horn 1882:105. NEBRASKA: War Bonnet Can. [DEUN] (**New state record**). WASHINGTON: Pend Oreille Co., Metaline Falls, VIII-30, Gibson, reared from limb *Larix occidentalis* Nutt. [GHNC]. (**New host record**)

Melanophila (*Phaenops*) *obtusa* Horn 1882:106. This species has been recorded only from Georgia and New York. LOUISIANA: Livingston Parish, 1.2 mi W Holden, 16-V-69, RLW, beating live *Pinus* sp.; ALABAMA: Grand Bay, VI-07, H. P. Loding [CASC] (**New state records**). One other specimen of this apparently rare species is in the CASC from NEW YORK: Bear Mountain, 5-VII-25, F. M. Schott.

Anthaxia (*s. str.*) *expansa* LeConte 1857:44. MONTANA: Flathead Co., Hungry Horse; Bigfork. Lake Co., Mission Mts.; Flathead Lake, Yellow Bay; Polson. Missoula Co., Seeley Lake; 10 mi W Ovando. Powell Co., Pipestone Pass, 6000'. Ravalli Co., Florence. Sanders Co., Thompson Falls; Paradise, Plains; Rainbow Lake. All collected on flowers by Loren Russell. NEBRASKA: War Bonnet Canyon, 27-V-01. Sioux Co.: Pine Ridge, 26-V-01; Hot Cr. Valley, 1-VI-01. All collected by R. H. Wolcott [DEUN]. (**New state records**)

Anthaxia (*Haplanthaxia*) *fisheri* Obenberger 1928:255. NEBRASKA: Lancaster Co., Hickman, 19-VI-69, B. C. Ratcliffe [GHNC]. (**New state record**)

Anthaxia (*Haplanthaxia*) *viridifrons* Gory 1841:284. NEBRASKA: Lancaster Co., Hickman, 10-VI-69, R. J. Luedtke [GHNC]. (**New state record**)

Actenodes mendax Horn 1891:46. In his discussion of this species Fisher (1942) referred to a specimen mentioned by Horn from Illinois as being probably mislabelled, since it was primarily known from Texas on *Prosopis juliflora* (SW) DC. However, a pair taken from a swimming pool under a *Gleditsia triacanthos* L. tree, MISSOURI: Raytown, 24-VI-75, D. E. Nelson [GHNC] and another, Lee's Summit, 18-VII-47, B. E. White [CASC] on the same species of tree, indicate that honey locust is probably another host for this beetle and the Illinois record is therefore quite possible. NEW MEXICO: Otero Co., Alamogordo, 11-VII-70, Bill Apperson [EMUS]. (**New state records**)

Chrysobothris analis LeConte 1860 (1859):238. Reared from *Cercis reniformis* Engelm., TEXAS: Real Co., 5 mi E Camp Wood, GHN, wood collected 2-VII-71, adults emerged 4-VIII-71 to 7-I-73; and from *Pithecolobium flexicaule* (Benth.) Coult., TEXAS: Starr Co., 2 mi W Sullivan City, GHN, wood collected IV-74, adults emerged 15-VII to 19-IX-74 (**New host records**). Also taken in MEXICO, SONORA: 15 mi E Navojoa and 22 mi W Alamos, 17-VII-63, RLW. SINALOA: 5 mi N Mazatlan, 10-VIII-65 and 19-VII-72, GHN; 22, 27-VII and 1-VIII-73, E. Giesbert [Giesbert Collection, RLWE]; Las Flores, 40 mi SSE Culiacan, 24-VII-71, E. M. Fisher [RLWE]. OAXACA: 18 mi E La Ventosa Jct., Hwy. 190, 21-VII-65, GHN; and 3 mi W Tehuantepec, 9-VII-65, GHN, on *Haematoxylon* sp. CHIAPAS: 28 mi W Cintalapa, 9-IV-62, Parker & Stange [UCDC]. (**New state records**)

Chrysobothris azurea LeConte 1857:8. MISSOURI: Montgomery Co., Graham Cave State Park, 6-VI-75, R. Heitzman, on foliage *Fraxinus a. americana* L.

Chrysobothris bimariginicollis Schaeffer 1905:148. Reared from infested limbs of *Quercus arizonica* Sarg. and *Q. hypoleucoides* A. Camus, taken in ARIZONA: Chiricahua Mts., South Fork of Cave Creek, GHN, wood collected VIII-73, adults emerged VIII-74. **(New host records)**

Chrysobothris bispinosa Schaeffer 1909:376. One female reared from limb of *Quercus hypoleucoides* A. Camus in ARIZONA: Chiricahua Mts., South Fork of Cave Creek, GHN, wood collected VIII-73, emerged 22-II-74 **(New host record)**. MEXICO, SONORA: Nogales, 11-X-65, A. E. Michelbacher [GHNC]. CHIHUAHUA: 32 mi S Hidalgo de Parral, 21-VIII-60, D. C. Rentz [CASC]. **(New record, Mexico)**

Chrysobothris blanchardi Horn 1886:93. MINNESOTA: Koochiching Co., T71, R24, S35, 30-VII-59, R. T. Franklin [UGCA]. NEBRASKA: Dawes Co., Chadron, 5-VII-68, B. C. Ratcliffe [GHNC]. ARIZONA: Coconino Co., Oak Creek Can., Pine Flat Cpgnd., 17, 18-VI-75, F. T. Hovore [RLWE]. CANADA, ONTARIO: Lake Nipissing, Sandy Island, 15-VII-23, E. Walker [GHNC] **(New state and provincial records)**. The occurrence of this insect in Arizona is very interesting, as the nearest recorded locality is Capitan, New Mexico, approximately 370 miles to the east-southeast. Elsewhere it seems to be found primarily in the northeastern states. This species has not been recorded from the Rocky Mountains, though undoubtedly it occurs there.

Chrysobothris debilis LeConte 1860 (1859):236. Chamberlin (1926) recorded this species from a number of southwestern states (some of which have been confirmed) but Fisher (1942) indicated that many of these records refer to *C. lateralis* and *C. rossi*. A confirming record for UTAH: Washington Co., St. George, collection of Vasco M. Tanner [BYUC]. *Acacia greggii* Gray is verified as a host in CALIFORNIA: Riverside Co., above Palm Desert, Hwy. 74, 2000 feet, wood collected 24-X-65, emerged 15-IV to 28-VI-66; and Imperial Co., Mountain Springs, 10 mi E Jacumba, wood collected 4-II-62, emerged 29-V to 11-VI-62, all GHN. Also reared from limbs *Salix* sp., ARIZONA: Yuma Co., 2 mi SW Yuma, W. H. Tyson [GHNC]. **(New host record)**

Chrysobothris dentipes (Germar) 1824:38. NEBRASKA: Thomas Co., Halsey, 25-VII-69, R. J. Leudtke [RLWE]. **(New state record)**

Chrysobothris humilis Horn 1886:99. MEXICO, SONORA: 47 mi N Hermosillo, 19-III-67, E. M. Fisher [RLWE]. **(New record, Mexico)**

Chrysobothris lateralis Waterhouse 1887:47. Previously reported from Arizona, New Mexico, Texas and Mexico. CALIFORNIA: San Bernardino Co., 12 mi NW Essex and Michell's Cavern, 16-VI-62, on *Acacia greggii* Gray, D. S. Verity & GHN; Providence Mts., Cedar Canyon, 17-VI-62, D. S. Verity **(New state record)**. These have the typical features of *C. lateralis* except the abdominal sternites have faint lateral smooth callosities (supposedly characteristic of *C. debilis* but variable in both species).

Chrysobothris libonoti Horn 1886:104. Reared from limbs of *Quercus hypoleucoides* A. Camus and *Q. arizonica* Sarg., ARIZONA: Chiricahua Mts., South Fork of Cave Creek, GHN, wood collected VIII-73, adults emerged 17-XII-73 to 28-III-75. **(New host records)**

Chrysobothris nixa Horn 1886:85. One specimen reared from *Cupressus nevadensis* Abrams, CALIFORNIA: Kern Co., near Bodfish, Derham Giuliani [CASC] **(New host record)**. This beetle is known to breed in several other plants of the family Cupressaceae and likely will be found in any member of this family growing within its range.

Chrysobothris paratabalipa Nelson 1975:29. MEXICO, JALISCO: Puerto Vallarta, 9-XII-75, W. F. Barr, on *Acacia cockliacantha* Humb. & Bonpl. **(New state record)**

Chrysobothris rossi Van Dyke 1942:117. MEXICO, NUEVO LEON: 41 mi N Matenhuala, Hwy. 57, 26-VI-65, GHN. **(New state record)**

Chrysobothris viridiceps Melsheimer 1845 (1844):147. TENNESSEE: Hardeman Co., VI-75, J. E. Wappes, emerged *Pinus* sp. [GHNC] **(New host and state record)**. OKLAHOMA: Osage Co., 35 mi W Pawhuska, 26-VI-67, RLW. NEW MEXICO: Grant

Co., 20 mi SW Silver City, VIII-74, R. H. Turnbow, emerged *Quercus* sp.; Las Cruces, 13-V-75 [GHNC] (**New state records**). TEXAS: Hidalgo Co., Bentsen-Rio Grande St. Park, 19-VI to 5-VII-75, R. H. Turnbow, emerged *Prosopis* sp. [Turnbow Coll., RLWE]. (**New host record**)

Agrilus abductus Horn 1891:325. MISSOURI: Jackson Co., Lake Jacomo, 13-VI-69, on *Gleditsia triacanthos* L. Henry Co., 14 mi SE Clinton, 19-VI-75, on *Quercus* sp., all GHN (**New state record**). Also TEXAS: Brazos Co., 4-IV-59, H. R. Burke, on *Zanthoxylum clavaherculis* L. [GHNC]; College Station, 19-IV-64, S. G. Wellso, on *Quercus stellata* Wang. [SGWC, GHNC].

Agrilus abstersus Horn 1891:324. ARIZONA: Congress Junction, 26-VI-64, on *Acacia constricta* Benth.; Sixshooter Canyon, near Globe, 8-VI-63, on *Prosopis juliflora* (SW) DC.; Santa Catalina Mts., Sabino Canyon, 11-VIII-61, on *Celtis pallida* (Planch), all GHN.

Agrilus acaciae Fisher 1928:279. Previously known only from Texas. MEXICO, SONORA: 15 mi E Navojoa, 21-VIII-59, RLW. (**New record, Mexico**)

Agrilus amelanchieri Knull 1944:80. This species was described from Mont Alto, Pennsylvania. The following records indicate a range similar to *A. vittaticollis* (Randall), a species associated with the same plant genera. OREGON: Jackson Co., Siskiyou Pass, 8,22-VII-70, RLW, on *Amelanchier florida* Lindl. [RLWE, ODAC, GHNC, CHAH, FMNH, W. F. Barr]. Marion Co.: Salem Airport, 4-VII-74, RLW, on *Crataegus douglasii* Lindl.; Salem, Cascade Gateway Park, 12-VII-74, on *C. douglasii* and 13-VII-74, on *A. florida*, RLW. Umatilla Co., McKay Creek, NE 1/4 Section 23, T1N, R32E, 29-VI-71, on *Crataegus* sp., RLW. UTAH: Carbon Co., 5 mi NW Helper, 25-VI-72, on *Amelanchier* sp., RLW. COLORADO: Pitkin Co., Aspen, Red Butte, 25-VII-75, F. M. Beer, on *Amelanchier* sp. NORTH DAKOTA: Richland Co., 7-VII-64, Robert Gordon. NEVADA: Elko Co., Ruby Mts., Lamoille, 20-VI-60, F. M. & V. S. Beer [GHNC]. CALIFORNIA: Modoc Co., Howard Gulch Public Camp, 6 mi NW Canby, 2-VII-65, F. M. Beer, on *A. florida*. (**New state records**)

Agrilus angelicus Horn 1891:298. Previously known only from California, where it occurs practically throughout the range of its host plants, *Quercus* spp. Southwestern OREGON: Jackson Co., Siskiyou Pass, 8-VII-70, RLW, on *Quercus* sp. [RLWE, ODAC]; Josephine Co., 3 mi S Cave Jct., 6-VII-69, RLW. (**New state record**)

Agrilus anxius Gory 1841:226. WASHINGTON: Walla Walla, R. L. Penrose & R. L. Westcott, reared from ornamental birch collected 27-IV-72, adults emerged 27-V-72 [WSUC] (**New state record**). This species was reported from Oregon by RLW in the 1968 Coop. Econ. Ins. Rept., 11:948.

Agrilus arcuatus arcuatus (Say) 1825:251. MISSOURI: Henry Co., 14 mi SE Clinton, 28-VI-73 & 19-VI-75, GHN, on foliage *Quercus* sp. (**New state record**)

Agrilus arcuatus corylicola Fisher 1928:71. Specimens from RHODE ISLAND: Westerly, 11-20-VI-36, M. Chapman [GHNC]. (**New state record**)

Agrilus arcuatus torquatus LeConte 1860 (1859):243. MISSOURI: Henry Co., 14 mi SE Clinton, 28-VI-73 and 19-VI-75, GHN, on foliage of *Carya ovata* (Mill.) K. Koch. (**New state record**)

Agrilus arizonicus Obenberger 1936:139. This species has been recorded only from Arizona, where it has been collected in large numbers. MEXICO, SINALOA: 34 mi E Villa Union, 27-VIII-60, RLW. MICHOACAN: Patzcuaro, 2100 m., 27-VII-47, T. H. Hubbell [GHNC]; Cotija, 3-IX-70, B. Villegas [UCDC]. (**New record, Mexico**)

Agrilus aureus Chevrolat 1837:98. TEXAS: Chisos Mts. Basin: 24,27-VII-71, GHN; (4-6)-VII-61, 2-VII-72, RLW. Davis Mts., Hwy. 118, 20 mi S Kent, 29-VII-69, GHN; N of Ft. Davis, Limpia Cyn.: 30-VI-71, GHN, all on *Sphaeralcea* sp.; (17-20)-VI-61, RLW, sweeping roadside vegetation. MEXICO, AGUASCALIENTES: Pabellón, 26-VI-56, R. P. Allen [CDAE, RLWE]. (**New state records**)

Agrilus baboquivariae Fisher 1928:184. This species has been recorded from *Celtis pallida* Torr. by Knull (1944). ARIZONA: Pima Co., Box Canyon, 18-VII-75, W. H. Tyson, on *Bumelia* sp.

Agrilus benjamini Fisher 1928:107. MISSOURI, Jackson Co., VI-53, R. H. Pine [GHNC]. (New state record)

Agrilus blandus Horn 1891:321. Two specimens reared from *Eriogonum elongatum* Benth., CALIFORNIA: San Bernardino Mts., mouth of Deep Creek, S. of Hesperia, G. H. & K. T. Nelson, plants collected 13-V-62, adults emerged 30-VII-62; one specimen taken from its pupal cell, same host, Los Angeles Co., San Gabriel Dam, 1600', 8-VIII-75, RLW (New host record). This species has been taken on *Eriogonum fasciculatum* Benth at numerous localities in southern California.

Agrilus cavatus Chevrolat 1838:99. MEXICO, COLIMA: 12 mi SW Colima, 1600', 3-VIII-71, E. M. Fisher [RLWE]. OAXACA: Temescal, 5,6-VII-65, G. H. Nelson, on *Acacia* sp. (New state records)

Agrilus celti Knull 1920:11. KENTUCKY: Paducah, PJC Campus, 10-VI-68, Don R. Harris. NEBRASKA: Sarpy Co., Bellevue, 6-VI-64 [GHNC]. (New State records)

Agrilus cephalicus LeConte 1860 (1859):249. MISSOURI: Kansas City, 4-VI-67, GHN, on *Cornus* sp.; Cooper Co., 2 mi S Blackwater, 10-VI-69, RLW (New state record). MICHIGAN: Washtenaw Co., Whitmore Lake, 9,10,17-VI-55, GHN, on *Cornus racemosa* Lam.

Agrilus chiricahuae Fisher 1928:243. Plant associated collections include ARIZONA: White Mts., S of McNary, 1-VII-64, 6 mi S Prescott, 29-VI-64, all on *Quercus utahensis* Ryd.; Huachuca Mts., Miller Canyon, 23-VIII-64 and Chiricahua Mts., 9 mi above Portal, 18,22-VII-75, all on *Q. hypoleucoides* A. Camus; 9 mi above Portal, 18-VII-75, on *Platanus wrightii* Wats., all collections GHN. Yavapai Co., Yarnell, 29-V-70, RLW, beating *Mimosa* sp.

Agrilus cliftoni Knull 1941:382. MISSOURI: Jackson Co., Raytown, 28-V to 1-VII-69, GHN, on *Juglans nigra* L.; Boone Co., Columbia, 10-VI-69, RLW. GEORGIA: Morgan Co., Hwy. 441, 6-V-73, R. H. Turnbow. (New state records)

Agrilus crataegi Frost 1912:247. on *Crataegus* sp.: MISSOURI: Jackson Co., Raytown, 4-VI-71; 5-VI-74; 10-VI-74 and Lee's Summit, 26-VI-74, all GHN; INDIANA: Tippecanoe Co., 5-VI-62; (8-10)-VI-64; (4-18)-VI-65, all N. M. Downie [RLWE, GHNC]; NEW YORK: Tompkins Co., 18-VI-65, N. M. Downie [RLWE] and Rossie, 15-VIII-56; 12-VI-64; 14-VI-65, all N. M. Downie [GHNC]. (New state records)

Agrilus crinicornis Horn 1891:294. MISSOURI: Jackson Co.: Lake Jacomo, 16-VI-69, GHN, on *Carya* sp.; Raytown, 4-VI-71, GHN, on *Juglans nigra* L. Boone Co., Columbia, 5-VII-66, C. W. Craig [RLWE]. (New state record)

Agrilus cupreonitens Fisher 1928:265. TEXAS: Lake Corpus Christi State Park, 7,8-IV-72, GHN, on *Acacia farnesiana* Willd.

Agrilus cyanescens (Ratzeburg) 1837:62. NEW YORK: Tompkins Co., Ithaca, 20-V, 8,9-VI-74, Tim L. McCabe [CUIC, RLWE]. (New state record)

Agrilus defectus LeConte 1860 (1859):244. MARYLAND: Howard Co., Ellicott City, 4-VI-68. NORTH DAKOTA: Cass Co., 12-VI-63; Grand Forks Co., Goose River, 22-VI-64; Richland Co., 7-VII-64, all Robert Gordon [RDGC, RLWE]. (New state records)

Agrilus diospyroides Knull 1942:390. MARYLAND: Prince Georges Co., Greenbelt, 8-VI-68, H. L. Dozier, on *Diospyros virginiana* L. [BKDC, GHNC]. (New state record)

Agrilus duncani Knull 1929. Ent. News 40:270. (*Agrilus nodicornis* Fall 1932. Pan-Pacific Ent. 8(2):82. New synonym). An examination of the unique male type reveals that it is an example of *A. duncani* with a deformity of the antennae in which segments 5 and 6 are fused. In the original description the collection date was recorded as 2-VII-24. The label on the type reads 12-VII-24.

Agrilus egeniformis Champlain & Knull 1923:84. TENNESSEE: Reelfoot Lake, 2-VI-54, D. J. & J. N. Knull [RLWE, FMNH] (New state record). This species is usually collected on *Gleditsia triacanthos* L., but a series was taken on *Sapindus drummondii* Hook & Arn., KANSAS: Barber Co.: Medicine Lodge, 2-VI-75; 7 & 8

mi W Medicine Lodge, 2,3-VI-75, all GHN, J. R. Heitzman; 5 mi W Medicine Lodge, 20,21-VI-75, GHN.

Agrilus exhuachucae Knull 1937:305. ARIZONA: Huachuca Mts., Miller Canyon, 19-VII-69, G. H. & D. E. Nelson, on *Quercus hypoleuroides* A. Camus [GHNC]; Cochise Co., 6 mi E Pierce, 8-VIII-73, GHN, sweeping roadside vegetation.

Agrilus fallax Say 1839 (1836):163. NEBRASKA: Sarpy Co., Fontanelle Forest, 11-VII-69, B. C. Ratcliffe [GHNC]. (New state record)

Agrilus ferrisi Dury 1908:368. MISSOURI: Kansas City, Swope Park, 15-VII-70; Henry Co., 14 mi SE Clinton, 1-VII-73, on *Celtis occidentalis* L., GHN. (New state record)

Agrilus fisherianus Knull 1930:3. Specimens of this species, described from a unique from Phoenix, Arizona, have been taken as follows. NEW MEXICO: San Marcial, 20-VII-61, J. G. Watts [GHNC]. CALIFORNIA: Needles, 11-VI-40, K. S. Hagen, all on *Salix* sp. (New state records)

Agrilus frosti Knull 1920:8. MISSOURI: Webster Co., 5 mi E Seymour, 26-IV-72 [GHNC]. (New state record)

Agrilus fuscipennis Gory 1841:238. Collected on *Diospyros virginiana* L., MISSOURI: Henry Co., 7 mi E Clinton, 17,20-VI-73, GHN; 14 mi E Clinton, 28-VI-73, GHN & M. Masters [RLWE]. (New state record)

Agrilus geminatus (Say) 1823:163. MINNESOTA: Houston Co., Mississippi Bluff, 1-2 mi N State Line, 1-VI-51; Winnebago Cr. Vy., 3-4 mi NE Eitzen, 2-VI-75 [DEFW]. GEORGIA: Clarke Co., Whitehall Forest, 7-VI-72, R. H. Turnbow. (New state records)

Agrilus gibbicollis Fall 1901:241. This species is recorded from practically throughout the southwestern United States and in Wyoming. NEVADA: Clark Co., Spring Mts., Kyle Canyon, 29-VII-61, RLW; Lincoln Co., Caliente, 14-VII-58, F. D. Parker [NSDA] (New state record). Specimens were taken by RLW on *Gutierrezia* spp., which undoubtedly are its hosts, in SE Utah and SW California.

Agrilus granulatus granulatus (Say) 1823:162. MINNESOTA: Itasca State Park, 1-VII-58, L. R. Abra [DEFW]. (New state record)

Agrilus granulatus liragus Barter & Brown 1949:247. A single specimen was taken from its pupal cell in *Populus tremuloides* Michx. in CALIFORNIA: Modoc Co., Hilton Spike, 30-VI-65, R. L. Penrose [RLWE]. Also NEVADA: Elko Co., Ruby Mts., Angel Lake Camp, 7000', 15, 19-VII-75, Ray Albright, J. H. Baker, on *P. tremuloides* Michx. [Albright Coll., JHBC, RLWE, GHNC] (New state records). This species, the hosts of which are *Populus* spp., often is confused in collections with the birch-feeder, *A. anxius* Gory. The known ranges of the 2 are quite similar, but the latter is not recorded from California or Nevada.

Agrilus granulatus mojavei Knull 1952, Ohio J. Sci., 52(6):352. (New status). When Carlson and Knight (1969) considered *A. g. granulatus* (Say) and its subspecies they did not consider *A. mojavei* Knull. The latter form is closely similar to *A. g. populi* Fisher, as pointed out by Nelson (1965), but is more uniformly brassy-cupreous in color and more densely pubescent ventrally. It appears, however, that *A. g. mojavei* is not specifically different from *A. g. granulatus* and its other subspecies and represents a southwestward extension, being found in southern California on *Populus fremontii* Wats.

Agrilus heterothecae Knull 1972:299. This species was previously recorded as *A. huachucae* Schaeffer (Nelson 1965).

Agrilus huachucae Schaeffer 1905:150. Previously recorded only from S. Arizona. NEW MEXICO: Catron Co., Gila Nat'l. Forest, Whitewater Public Camp, 11 to 14-VII-70, J. A. Gruwell [RLWE]. (New state record)

Agrilus illectus Fall 1901:242. OREGON, Malheur Co., Basque Station, Hwy. 95, 3-VII-74, K. J. Goeden, on shadscale, *Atriplex confertifolia* (Torr.) Wats. [ODAC] (New State record). New plant records for adults from CALIFORNIA: San Diego Co., Oak Grove, 24-VI-62, GHN, on *Lotus scoparius* (Nutt.) Ottley; Los Angeles Co., San Gabriel Mts. along Throop Peak Trail, 8100', near Dawson Saddle, 28-VI, 8-VII-75, RLW, on *Eriogonum umbellatum aridum* (Greene) S. Stokes.

Agrilus imbellis Crotch 1873:94. When Fisher (1928) compared this species with *A. lacustris* LeConte the records indicated *A. imbellis* to be confined to the Atlantic States, from Massachusetts to Florida, and *A. lacustris* to the Middle West, from Lake Superior to Texas and westward to southern California. The range of *A. imbellis* is more extensive than was believed by Fisher, with new records as follows. **MISSISSIPPI**: Greenville, 16-VIII-45, A. G. Peterson [DEFW]. **MICHIGAN**: Livingston Co., E. S. George Reserve, 12-VII-53, GHN. **MINNESOTA**: Anoka Co., St. Paul Water Works, 20-VII-51 [DEFW] (**New state records**). Chamberlin (1926) included Texas in the distributional range for this species, but Fisher (1928) felt that this probably was based on misidentified specimen(s) of *A. lacustris* LeConte. However, the following records confirm the occurrence of *A. imbellis* in **TEXAS**: Burnet Co., Inks Lake St. Park, 18-IV-62, T. M. Peters, F. W. Stehr [DEFW]; Brazos Co., 1 mi W College Station, 16-V-64, S. G. Wellso, on *Bigelovia virgata* (Nutt.) DC. [SGWC, GHNC].

Agrilus juglandis Knull 1920:7. Reared from *Juglans*?, **MARYLAND**: Takoma Park, emerged 18-II-51, D. G. Kissinger [GHNC]. (**New state record**)

Agrilus lacustris LeConte 1860 (1859):250. **MEXICO**, **SONORA**: Navojoa, 13-VII-58, RLW. **SINALOA**: 20 mi SE El Fuerte, 12-VII-62, E. L. Sleeper [CSLB]. (**New state records**)

Agrilus lecontei lecontei Saunders 1871:117. **NEBRASKA**: Sarpy Co., Fontanelle Forest, 11-VII-69, B. C. Ratcliffe [GHNC]. (**New state record**)

Agrilus secontei celticola Fisher 1928:294. **NEW MEXICO**: Chavez Co., 8 mi E Elk, Hwy. 83, 11-VII-63, GHN, on *Celtis* sp. **KANSAS**: Barber Co., 7 & 8 mi W Medicine Lodge, 2,21-VI-75, GHN & J. R. Heitzman, all on *Celtis laevigata* var. *texana* Sarg. **OKLAHOMA**: Oklahoma City, 6-VI-71, GHN, on same plant. (**New state records**)

Agrilus limpiae Knull 1941:283. **KANSAS**: Barber Co., 8 mi W Medicine Lodge, Red Hills, 2-VI-74, J. R. Heitzman [GHNC], 2-VI-75, GHN & J. R. Heitzman and 5 mi W Medicine Lodge, 21-VI-75, GHN, all on *Sapindus drummondii* Hook. & Arn. (**New state record**)

Agrilus malvastri Fisher 1928:247. This species has been collected in Texas, New Mexico, and Arizona on *Sphaeralcea* spp., GHN.

Agrilus masculinus Horn 1891:295. **NEBRASKA**: Sarpy Co., Bellevue, 29-V-64, on *Acer* sp. [GHNC]. **NORTH DAKOTA**: Bottineau Co., 23-VI-62; Cass Co., 12-VI-63; Grand Forks Co., Goose River, 15-VI-64; Richland Co., 17-VI-64, all Robert Gordon [RDGC, RLWE]; Ward Co., 6-VI-58, Edw. Saugstad [RDGC]. **MINNESOTA**: Pipestone Co., Pipestone Nat. Mon., 5-VII-73, malaise trap [DEFW]. (**New state records**)

Agrilus oblongus Fisher 1928:333. **GEORGIA**: Clarke Co., Whitehall Forest, 11-V-75, R. H. Turnbow. (**New state record**)

Agrilus obsoletoguttatus Gory 1841:256. **NEBRASKA**: Sarpy Co., Fontanelle Forest, 10-VI-69, B. C. Ratcliff [GHNC]. **MINNESOTA**: Anoka Co., Carlos Avery Wildlife Ref., 24-VI-71, B. Cutler; Houston Co., Winnebago Cr. Vy., 3-4 mi NE Eitzen, 29-V-49; S Minneiska, John Latsch St. Pk. [DEFW]. (**New state records**)

Agrilus olentangyi Champlain & Knull 1925:469. **MISSOURI**: Jackson Co.: Raytown, 4-VI-71, on *Quercus* sp., 28-V-69, on *Celtis occidentalis* L. Lake Jacomo, 16-VI-69, all GHN. (**New state record**)

Agrilus ornatulus Horn 1891:319. **KANSAS**: Barber Co., 5 mi W Medicine Lodge, 21-VI-75, GHN, on foliage of young *Sapindus drummondii* Hook. & Arn. (**New state record**)

Agrilus osburni Knull 1937:38. **GEORGIA**: Clarke Co., Whitehall Forest, 1-15-V-75, R. Turnbow. (**New state record**)

Agrilus parabductus Knull 1954:28. **TEXAS**: Starr Co., 9-IV-63, D. J. & J. N. Knull, on *Acacia* sp. [FMNH, GHNC].

Agrilus paracelti Knull 1972:113. **KANSAS**: Barber Co., 7 mi W Medicine Lodge, 2-VI-75, GHN & J. R. Heitzman, and 8 mi W Medicine Lodge, 21-VI-75, GHN, all on *Celtis laeviata* var. *texana* Sarg. **OKLAHOMA**: Oklahoma City, 6-VI-71, GHN,

on same plant. *GEORGIA*: Clarke Co., Whitehall Forest, 22-V-72, R. H. Turnbow. *MISSOURI*: Jackson Co., Raytown, 28-V, 7-VI-69, GHN, on *Celtis occidentalis* L. *NEBRASKA*: Sarpy Co.: Fontanelle Forest, 11-VII-69; Bellevue, 28-VI-69, both B. C. Ratcliffe [GHNC]. (**New state records**)

Agrilus paramasculinus Champlaine & Knull 1923:274. *MISSOURI*: Clay Co., Coolie Lake, 10-V-75, GHN, on foliage of *Gymnocladus dioica* (L.) K. Koch. (**New state record**). *KANSAS*: Geary Co., Konza Prairie Reserve, 14 mi E Junction City, H. A. Hespenheide, reared from branches *Gymnocladus dioicus* (L.) K. Koch collected 11-III-74, adults emerged beginning 3-IV and thereafter -74. (**New host record**)

Agrilus parapubescens Knull 1934:68. When this species was described, nothing was known of its habits. *ARIZONA*: Portal, 11-VI-63; E of Globe, Gilson Butte, 8-VI-63, all on *Acacia greggii* Gray; Sixshooter Canyon, near Globe, 9-VI-63, on *Prosopis juliflora* (Swartz) DC., all GHN.

Agrilus parkeri Knull 1935:189. Previously recorded as reared from black oak slash (Knull 1937). Emerged from limbs of *Quercus arizonica* Sarg., *Q. emoryi* Torr., and *Q. hypoleucoides* A. Camus, all from *ARIZONA*: Chiricahua Mts., South Fork of Cave Creek, wood collected VIII-73, adults emerged 10-XI-73 to 10-II-74, GHN. (**New host records**)

Agrilus pseudofallax Frost 1923:279. *MISSOURI*: Jackson Co.: Lake Jacomo, 13, 16-VI-69; Raytown, 25-V-69, 5-V-70; Sugar Creek, 6-VI-75, all GHN, on *Gleditsia triacanthos* L. (**New state record**)

Agrilus pubifrons Fisher 1928:237. *CALIFORNIA*: Mono Co.: L. Big Rock Cr. P. C., 7500', 27-VI-68, E. L. Sleeper [CSLB]; Rock Creek, 6300', 25-VIII-72, Derham Giuliana, on *Chrysothamnus* sp. [CASC]. (**New state record**)

Agrilus pulchellus Bland 1865:382. *UTAH*: Cache Co., Logan, 4-VIII-65, R. M. Bohart [UCDC]; Cornish, 12-VII-71, E. Grisell, R. M. Bohart [UCDC, RLWE], 18, 20-VII-59, 17-VIII-62, 10-VII & 10-IX-63, VIII-68, G. Bohart, R. Brumley, P. Torchio [EMUS, RLWE]. *NORTH DAKOTA*: Richland Co., 27-VII-62, Robert Gordon (**New state records**). The latter represents the northernmost record for this species, the nearest recorded localities being in northern Utah and southeastern Kansas. *A. pulchellus* thus appears to be widespread in the Plains and Mountain States, ranging south into Mexico.

Agrilus pusillus (Say) 1825:252. *NORTH DAKOTA*: Richland Co., 1-VII-64, Robert Gordon (**New state record**). Fisher (1928) lists this species from South Dakota with "no definite locality". A confirming record is *SOUTH DAKOTA*: Oglala, White River, 21-VI-66, Robert Gordon.

Agrilus quadriguttatus quadriguttatus Gory 1841:228. *MISSOURI*: McBaine, 16-VI-49, G. W. Thomas [GHNC]. *INDIANA*: Lafayette, 16-VII-56, GHN, on *Salix* sp. *NEBRASKA*: Lancaster Co., Hickman, 23-VI-69, R. J. Leudtke [RLWE]. (**New state records**)

Agrilus quadriguttatus fulminans Fisher 1928:148. *NEVADA*: Washoe Co., Verdi, 26-VI-62, RLW. (**New state record**)

Agrilus quercicola Fisher 1928:120. Known previously from Colorado, Arizona, New Mexico, and Utah. *TEXAS*: Davis Mts., 19-VI-58, D. J. & J. N. Knull [FMNH, GHNC]; Davis Mts., Limpia Canyon, 17/20-VI-61, RLW. (**New state record**)

Agrilus quercus Schaeffer 1905:150. *ARIZONA*: Huachuca Mts., Miller Canyon, 23-VIII-64; Santa Rita Mts., Madera Canyon, 14-VIII-65, both *Quercus arizonica* Sarg.; Madera Canyon, 3-VIII-74, on *Q. hypoleucoides* A. Camus, all GHN.

Agrilus rubrovittatus (Waterhouse) 1889:50. In general appearance specimens are similar to *A. pulchellus* Bland; however, in the latter the lateral impressions of the pronotum are strong and the dense pubescence of the abdominal sternites is lacking along the posterior margins and posterolateral angles, whereas in *A. rubrovittatus* the pronotum is more evenly convex and the dense pubescence of the abdominal sternites is rather evenly distributed. This species was previously known only from Mexico. *COLIMA*: Armeria, 27-VII-63, RLW; 13 mi NW Manzanillo, 25-VII-66, D. S. Verity, on *Boerhaavia erecta* L. [Verity Coll., RLWE]. *GUERRERO*: 3 mi N Chilpancingo, 17-VIII-70, E. M. Fisher [RLWE] (**New state records**). *ARIZONA*:

Huachuca Mts., Miller Canyon, 19-VII-63, G. H. & D. E. Nelson, sweeping grass; Chiricahua Mts., 9 mi above Portal, 31-VII-75, all GHN, on bunch grass, *Muhlenbergia longiligula* Hichc. (**New record, USA**). In the specimens from Colima the cupreous vitta does not extend to the apex of each elytron as it does in specimens from Arizona.

Agrilus sapindi Knull 1938:139. Described from 2 males from Texas, Davis Mts. KANSAS: Barber Co., 5 mi W Medicine Lodge, 2-VI-75, GHN & J. R. Heitzman, and 21-VI-75, GHN, all on foliage of very young *Sapindus drummondii* Hook. & Arn. (**New state record**). TEXAS: Frio Co., Jct. Hwy. 140 & Frio River, W of Pearsall, 9-VII-75, GHN & G. V. Manley.

PLESIALLOTYPE FEMALE, with foregoing Texas data. Closely similar to male but differs as follows: slightly more robust; front of head and elytra green, vertex of head, pronotum & ventral surface aeneous with green tints; tibiae lacking mucrones. Length 8.5 mm; width 2.7 mm. In the series at hand both sexes vary from rather uniform green to green with aeneous tints. The males vary in length from 8.2 to 9.5 mm, in width from 2.5 to 3.0 mm; the females 8.5 to 10.0 mm in length and 2.7 to 3.5 mm in width.

Agrilus scitulus Horn 1891:318. KANSAS: Barber Co.: 8 mi W Medicine Lodge, 2-VI-75, GHN & J. R. Heitzman; 5 mi W Medicine Lodge, 21-VI-75, GHN, all on the foliage of young *Sapindus drummondii* Hook. & Arn. (**New state record**). TEXAS: Lake Corpus Christi State Park, 7-VI-54, H. F. Howden, on *Carya pecan* Engelm. & Graebn. [HAHC, GHNC].

Agrilus subcinctus Gory 1841:252. KANSAS: Barber Co., 8 mi W Medicine Lodge, 2-VI-75, GHN & J. R. Heitzman, on *Fraxinus* sp. NEBRASKA: Lancaster Co., Hickman, 19-VI-69, B. C. Ratcliffe [GHNC]. (**New state records**)

Agrilus townsendi Fall 1907:234. Adults were reported from *Quercus utahensis* (Cand.) Rydb. by Fisher (1928). One male was taken on *Q. hypoleucoides* A. Camus, ARIZONA: Chiricahua Mts., 6 mi above SW Res. Sta., 24-VII-69, GHN.

Agrilus transimpressus Fall 1925:181. MISSOURI: Jackson Co., Raytown, 28-V-69; Lake Jacomo, 16-VI-69, all GHN, on *Juglans nigra* L. MINNESOTA: Houston Co., Mississippi Bluff, 1-2 mi N State Line, 1-VI-51, 22-V-48, 27-V-55, B. Furgola [DEFW, RLWE]. (**New state records**)

Agrilus ventralis Horn 1891:320. This odd and rarely collected species has been recorded from New Mexico, Arizona and California. NEVADA: White Pine Co., Lehman Caves, 9-VII-66, R. P. Allen [CDAE]; Clark Co., Spring Mts., Kyle Canyon, 18-VII-70, B. W. Miller, on *Chrysothamnus* sp. [B. W. Miller Collection, WFBC] (**New state record**). A small series was swept from foliage of *Encelia virginensis actoni* (Elmer) Keck, CALIFORNIA: Inyo Co., .3 mi E Independence, 26-V-74, RLW. *E. v. actoni* probably serves as a larval host for this beetle; other genera and species of Compositae possibly serve as hosts elsewhere in its range.

Agrilus vittaticollis Randall 1838:38. MONTANA: Sanders Co., Plains and 13 mi NE St. Regis, Loren Russel. UTAH: Carbon Co., 15 mi NW Price, 6800', 25-VI-72, *Amelanchier* sp., RLW. NORTH DAKOTA: Pembina Co., 12-VII-62, Robert Gordon (**New state records**). This species heretofore has been recorded from Maine to Florida, westward to Washington and N. California, though not from a number of states between. However, it probably occurs throughout the range of its primary host plants, *Crataegus* spp. and *Amelanchier* spp. It is not often collected in large numbers but W. F. Barr and RLW took upwards of 100 specimens on *Crataegus douglasii* Lindl. during VII-74, in OREGON: Marion Co., Salem.

Pachyschelus purpureus (Say) 1839 (1836):164. ALABAMA: Madison Co., Huntsville, 11-IX-74, Lester L. Lampert [RLWE]. (**New state record**)

Brachys aerosus Melsheimer 1845:148. NEBRASKA: Sarpy Co., Fontanelle Forest, 10-VI-69, B. C. Ratcliffe, on *Quercus* sp. [GHNC]. NORTH DAKOTA: 10 mi W Cavalier, 7-VII-66; Bottineau Co., 12-VII-62, 9-VII-64; Eddy Co., 5-VI-63, all Robert Gordon; Cass Co., 20-VI-61, Robert Tetrault [RDGC]; Slope Co., Chalky Buttes, 7-VI-65, L. Grochowski [RLWE]. (**New state records**)

Brachys aeruginosus Gory 1841:335. MISSOURI: Henry Co., 14 mi SE Clinton,

16-VI-74, GHN, on *Quercus alba* L.; Boone Co., Columbia, 10-VI-69; Cooper Co., 2 mi S Blackwater, 10-VI-69, both RLW. (**New state record**)

Brachys ovatus (Weber) 1801:76. **NEBRASKA**: Sarpy Co., Bellevue, 28-VI-69, B. C. Ratcliffe [GHNC]. (**New state record**)

Taphrocerus agriloides Crotch 1873:75. **NORTH CAROLINA**: Bell Island, 10-V-52, GHN. **MISSOURI**: Brunswick, 26-V-71, W. S. Craig [GHNC]. (**New state records**)

Taphrocerus albonotatus Blatchley 1919:29. **NEW JERSEY**: Ocean Co., Bamber, 2-VII-66, L. L. Pechuman [CUIC, GHNC, RLWE]. (**New state record**)

Taphrocerus howardi Obenberger 1934:42. Collected in malaise trap, **MISSOURI**: Holt Co., Mound City, 6-IX to 7-X-68 [GHNC]. (**New state record**)

Taphrocerus laevicollis LeConte 1878:403. **MISSISSIPPI**: Pascagoula, 16-V-60, B. K. Dozier [BKDC, RLWE]. (**New state record**)

Taphrocerus schaefferi Nicolay & Weiss 1920:144. **MICHIGAN**: Ann Arbor, 19-VI-53, GHN; Lenawee Co., Morenci, 1-VI-74, S. G. Wellso [RLWE]. **INDIANA**: Indianapolis, 12-VI-44, E. L. Mockford. **MARYLAND**: 6 mi S Plum Point, 24-V-53, GHN. **MISSOURI**: Holt Co., Mound City, 6-25-IX-68, Malaise trap, all [GHNC]. (**New state records**)

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