Valid name

Berginus nigricolor Champion

Synonymy/catalog
Berginus nigricolor Champion, 1913:117
Berginus nigricolor: Hetschko, 1930:21
Berginus nigricolor: Parsons, 1975:107, fig. 58
Berginus nigricolor: Young 2002:400
Berginus sp. EGR 1: Bender et al., 2005:775

Classification
Family: Mycetophagidae
Subfamily: Bergininae

Diagnostic remarks
This is an obscure, non-descript, very small beetle that is strongly flattened with subparallel-sided elytra. The head (including eyes) is nearly was wide as the pronotum and the pronotum is narrower than the base of the elytra. The body length ca. 1.4-1.6 mm and the maximum width is 0.5-0.7 mm at the elytral mid-length. The color of the body is dark grayish, almost black, sometimes with a slight reddish tint. The vertex of the head is broad and flat and the eyes are lateral. The legs and antennae are black or rarely with slight reddish tint. The antennae are clavate in shape with a terminal club composed of two segments. The penultimate segment of the antenna is slightly longer than the terminal segment. The dorsum, including the head, is densely finely punctate and covered with sparsely-set, short, curved hairs. Punctation of the elytra is serially arranged with all the rows close together and equally spaced.

The genus is keyed in Young (2002), and Parsons (1975) provides a key to the species recorded from America north of Mexico. An image of this species is available on the web: http://bugguide.net/node/view/290191 (last accessed November 18, 2009).

Historic Occurrence Records

1) From literature: See "literature records" on attached Excel spreadsheet.

2) From specimens examined: See "specimen records" on attached Excel spreadsheet.

3) From communicated records: None.

Known Range
Brownsville area of Texas (Cameron County), south to Mexico, Guatemala, Nicaragua, and Panama.

Biology, Host, Substrate, Habitat Data

1) From literature: Almost nothing on this species was found the literature, except the mention by Champion (1913) and Parsons (1975) of a specimen from Brownsville labeled "on dead cotton bolls."

2) From specimens: The following were recorded from labels of specimens examined: “on dead cotton bolls,”, “on Banana debris” [from Guatemala], and “on Chrysanthemum flowers” [from Mexico]. All references to dead cotton bolls appear to be based on a single specimen in the USNM collection.

3) From communicated records: A short series of specimens was taken by beating *Bumelia* in bloom at the Sabal Palm Grove (E. G. Riley, personal observation). *Bumelia* as used here equals the genus *Sideroxylon* (Sapotaceae).

Biology, Host, Substrate, Habitat Data by Inference (based on knowledge of related species)

Most members of the family Mycetophagidae are associated with a wide array of fungi. This does not seem to be the case with *Berginus* species that have been found feeding on pollen. One species is known to breed in the male cones of pine. Still another species is known to be a predator of a lac scale insect (Lawrence 1991).

Adult Phenology in Texas

1) Number of compiled Texas collecting events by month: April (3), October (5).

2) Year of most recent known collection in Texas: 1994.

Literature Cited

Bender, S., S. Shelton, K. C. Bender, and A. Kalmbach (eds.). 2005. Texas Comprehensive Wildlife Strategy, 2005-2010. Texas Parks and Wildlife, Austin. xv + 1131 pp.

Champion, G. C. 1913. Notes on various Central American Coleoptera, with descriptions of new species. Transactions of the Entomological Society of London 1913: 58-169, pls. iii-iv.

Hetschko, A. 1930. pars 108, Phalacridae, Mycetophagidae, Tretocthoracidae, Jacobsoniidae, Cavicoxumidae, Gnostidae, *in* S. Schenkling (ed.).Coleopterosum Catalogus. W. Junk, ‘s-Gravenhage. pp. 1-76.

Lawrence, J. F. 1991. Mycetophagidae (Tenebrionoidea), pp. 498-500, *in* Stehr, F. (ed). Immature Insects Vol. 2. Kenall / Hunt, Dubuque. i-xvi + 975 pp.

Parsons, C. T. 1975. Revision of Nearctic Mycetophagidae (Coleoptera). The Coleopterists Bulletin 29(2): 93-108.

Young, D. K. 2002. Mycetophagidae Leach, 1815, pp. 399-400, *in* Arnett, R. H., M. C. Thomas, P. E. Skelley, and J. H. Frank (eds.). American Beetles. Polyphaga: Scarabaeoidea through Curculionoidea. Volume 2. CRC Press. xiv + 1-861 pp.

Valid name

Chalcodermus semicostatus Schaeffer

NOTE: It was discovered during the course of preparing this report, that this species belongs in the genus *Rhyssomatus* Schönherr (tribe Cleogonini) and not in *Chalcodermus* Dejean as originally proposed. This generic assessment is agreed upon by R. S. Anderson and C. W. O'Brien (personal communications to E. G. Riley, August 2009). The needed generic change was also noted by Donald Whitehead (deceased) as evidenced by his notations on specimens in the National Museum of Natural History collection (USNM). A formal transfer has not been published, thus the species is retained in *Chalcodermus* for the purpose of this report.

Synonymy/catalog
Chalcodermus semicostatus Schaeffer, 1904:232
Chalcodermus semicostatus: Leng, 1920:332
Chalcodermus semicostatus: Hustache, 1936:52
Chalcodermus semicostatus: O'Brien & Wibmer, 1982:134
Chalcodermus semicostatus: Carlow, 1997:121
Chalcodermus semicostatus: Bender et al., 2005:774

Classification [of *Rhyssomatus* Schönherr]
Family: Curculionidae
Subfamily: Molytinae
Tribe: Cleogonini
Classification of *Rhyssomatus* and related genera has been variable. Presently *Rhyssomatus* and close relatives are grouped in the within the subfamily Molytinae. These genera were earlier considered to be part of the Cryptorhynchinae (Kissinger 1964), a weevil subfamily that is currently recognized in a more restricted sense. This report follows the classification in Zarazaga & Lyal (1999) and Anderson (2002).

Diagnostic remarks
This is a somewhat non-descript molytine weevil. The body is stout and broadly ovate in shape from dorsal view, with the elytra evenly rounded and broadest at the anterior third. The body length ranges from ca. 3.6 to 4.0 mm, and the greatest width across the elytra is from ca. 2.1 to 2.3 mm. The coloration is everywhere black without metallic reflections, and glabrous. In life, the body can be covered with a pollenose bloom, appearing "dusty," that is usually rubbed off preserved specimens. Similar body coatings are known in certain other *Rhyssomatus* species (E. G. Riley, personal observation). The eyes are very narrowly separated. The base of its rostrum in repose fits into a median channel on the prosternum anterior to the procoxae and the procoxae are widely separated. The mesosternum is normal and does not receive the apex of the rostrum which remains free in repose. The sides of the prothorax are weakly lobed on each side covering the posterior margin of the eye. The pronotum is deeply punctate and the elytra have rows of large deep punctures separated by carinae that arise and are strongest apically. All femora are

armed internally with a large spine. The tarsal claws are weakly divergent and cleft (split), each with a short fine inner lobe.

The genus *Chalcodermus* is keyed in the standard keys to North American weevil genera (Kissinger 1964, Anderson 2002); however, this species will key to *Rhyssomatus* (as noted above) separating at couplet 5 since its tarsal claws are cleft (split). An image of this species is available on the web: http://bugguide.net/node/view/290201 (last accessed: November 12, 2009).

Historic Occurrence Records

1) From literature: See "literature records" on attached Excel spreadsheet.

2) From specimens examined: See "specimen records" on attached Excel spreadsheet.

3) From communicated records: See "communicated records" on attached Excel spreadsheet.

Known Range

Brownsville area of Texas (Cameron County).

Biology, Host, Substrate, Habitat Data

1) From literature: None.

2) From specimens: None.

3) From communicated records: Specimen records communicated by R. S. Anderson and C. W. O'Brien include specimens labeled, … "on *Pithecellobium flexicaule* (Benth.)." This is an older name for Texas ebony, *Ebenopsis ebano* (Berl.) Barneby & Grimes (Fabaceae).

Biology, Host, Substrate, Habitat Data by Inference (based on knowledge of related species)

Species of *Rhyssomatus* are known to develop in the pods of milkweed (Asclepiadaceae) and to breed in a fungus associated with *Ipomoea* (Convolvulaceae). Adults of *R. pruinosus* have been reared from the seeds of *Acacia greggii* A. Gray (Fabaceae) (Pierce, 1907).

Adult Phenology in Texas

1) Number of compiled Texas collecting events by month: March (1), May (10), June (2), July (1), October (4).

2) Year of most recent known collection in the Lower Rio Grande Valley: 1994.

Literature Cited

Alonso-Zarazaga, M. A. & C. H. C. Lyal. 1999. A world catalogue of families and genera of Curculionoidea (Insecta: Coleoptera). Entomopraxis, Barcelona. 315 pp.

Anderson, R. S. 2002. Curculionidae Latreille, 1802, pp. 722-815, *in* Arnett, R. H., M. C. Thomas, P. E. Skelley, and J. H. Frank (eds.). American Beetles. Polyphaga: Scarabaeoidea through Curculionoidea. Volume 2. CRC Press. xiv + 1-861 pp.

Bender, S., S. Shelton, K. C. Bender, and A. Kalmbach (eds.). 2005. Texas Comprehensive Wildlife Strategy, 2005-2010. Texas Parks and Wildlife, Austin. xv + 1131 pp.

Carlow, T. A. 1997. A faunal survey and zoogeographic analysis of the Curculionoidea (Coleoptera) (excluding Anthribidae, Platypodinae, and Scolytinae) of the Lower Rio Grande Valley of Texas. unpublished thesis, Texas A&M University. xi + 1-274 pp.

Hustache, A. 1936. Pars 151. Curculionidae: Cryptorrhynchinae, in S. Schenkling (ed.). Coleopterorum catalogus.W. Junk, Berlin. pp. 1-317 pp.

Kissinger, D. G. 1964. Curculionidae of America north of Mexico: a key to the genera. South Lancaster, MA. Taxonomic Publications. v + 1-143 pp.

Leng, C. W. 1920. Catalogue of the Coleoptera of America, north of Mexico. John D. Sherman Jr., Mount Vernon, New York. x + 1-470 pp.

O'Brien, C. W. and G. J. Wibmer. 1982. Annotated checklist of the weevils (Curculionidae *sensu lato*) of North America, Central America, and the West Indies (Coleoptera: Curculionoidea). Memoirs of the American Entomological Institute (34): i-ix + 382 pp.

Pierce, W. D. 1907. On the biologies of the Rhynchophora of North America. Studies from the Zoological Laboratory, The University of Nebraska no. 78: 246-320.

Schaeffer, C. F. A. 1904. New genera and species of Coleoptera. Journal of the New York Entomological Society 12(4): 197-236.

Valid name

Chalcodermus serripes Fåhraeus

Synonymy/catalog

Chalcodermus serripes Fåhraeus, 1837:385 [reference not seen]
Chalcodermus serripes: Champion, 1902-1906 (1904):325; pl. xvii, figs. 12, 12a-b
Chalcodermus serripes: Schaeffer, 1904:233
Chalcodermus serripes: Leng, 1920:332
Chalcodermus serripes: Hustache, 1936:52
Chalcodermus serripes: Blackwelder, 1947:857
Chalcodermus serripes: O'Brien & Wibmer, 1982:134
Chalcodermus serripes: Wibmer & O'Brien, 1986:182
Chalcodermus serripes: Carlow, 1997:121
Chalcodermus serripes: Julien & Griffiths, 1998:76
Chalcodermus serripes: Heard, O'Brien, Forno, & Burcher, 1989:4, figs. 11-12
Chalcodermus serripes: Heard, Burcher, & Forno, 1999:1-9, fig. 1
Chalcodermus serripes: Bender et al., 2005:774

Classification
Family: Curculionidae
Subfamily: Molytinae
Tribe: Sternechini
Classification of *Chalcodermus* and related genera has been variable. Presently *Chalcodermus* and close relatives are grouped in the tribe Sternechini within the subfamily Molytinae. These genera were earlier considered to be part of the Cryptorhynchinae (Kissinger 1964) which is currently recognized in a more restricted sense. This report follows the classification in Zarazaga and Lyal (1999) and Anderson (2002).

Diagnostic remarks
This is a distinctive weevil not likely to be confused with other species found in the Lower Rio Grande Valley, Texas. Its shape from dorsal view is distinctive, with the elytra broadest at the humeri and sharply tapering posteriorly. The body length ranges from ca. 4.0 to 5.9 mm, and the greatest width across the humeri is from 1.8 to 2.3 mm. The coloration is dark reddish brown with variable, but usually strong, coppery-green reflections that are least developed on the elytra. The eyes are narrowly separated in both sexes, but those of the male are notably closer together. The rostrum in repose fits into a median channel on the prosternum anterior to the procoxae. The procoxae are narrowly separated. The mesosternum is normal and does not receive the apex of the rostrum which remains free in repose. Sides of the prothorax are weakly lobed on each side covering the posterior margin of the eye. The pronotum is deeply strigose and the elytra have rows of large deep punctures, variably-developed small patches of whitish scales, and lack carinae. All femora are armed internally with a large spine, and the inner carina of the tibia is distinctly serrate on all legs. The tarsal claws are connate at base, simple.

The genus *Chalcodermus* is keyed in the standard keys to North American weevil genera (Kissinger 1964, Anderson 2002). Heard et al. (1989) provided diagnostic characters to distinguish *C. serripes* from similar species associated with *Mimosa pigra* L. Images of a preserved specimen are available on the web: http://bugguide.net/node/view/341602 (last accessed: November 11, 2009).

Historic Occurrence Records

1) From literature: See "literature records" on attached Excel spreadsheet.

2) From specimens examined: See "specimen records" on attached Excel spreadsheet.

3) From communicated records: See "communicated records" on attached Excel spreadsheet.

Known Range

Brownsville area of Texas (Cameron County) south throughout most of the tropical mainland to Brazil and Argentina.

Biology, Host, Substrate, Habitat Data

1) From literature: Host plant relationships and life history of *C. serripes* were reported by Heard et al. (1999). In choice and no-choice tests, adults were found to feed on 10 of 71 legume (Fabaceae) species tested, but they only oviposited on one species, *Mimosa pigra* L. Females deposit eggs directly on the seed through the pod wall. Larvae required ca. 14 days for development, feeding directly on the seed, and remained within a single pod segment. Larvae entered a pre-pupal stage and remained in the pod segment eventually fell to the ground. In the field, larvae exited the pods the next year with the on-set of the wet season and entered the soil for pupation. Adults emerged from the soil 3-4 weeks later. Heard et al. (1999) state, … "*C. serripes* is a common insect associated with populations of *M. pigra* in Mexico, Venezuela, Brazil, Argentina, and probably Central America and other parts of North and South America. It has been collected only on *M. pigra* despite considerable collecting effort on legumes fruiting close to populations of *M. pigra*."

2) From specimens: The following data are from specimen labels examined: "nr. beach", "taken at light", "on string bean leaves", "on *Mimosa* leaves", and "with *Acacia* blossoms".

3) From communicated records: The following data accompanied communicated specimen records: "on *Mimosa pigra*", "at UV light", "*Mimosa*", "at night", and "UV".

Biology, Host, Substrate, Habitat Data by Inference (based on knowledge of related species).

Where known, species of *Chalcodermus* develop in the seeds of their host plants (Alsterlund 1937, Heard et al. 1998, and Heard et al. 1999). Across the genus, plants belonging to multiple families are attacked (Anderson 2002).

Adult Phenology in Texas

1) Number of compiled Texas collecting events by month: May (4), June (4), July (1), August (2).

2) Year of most recent known collection in the Lower Rio Grande Valley: 1944. A fair number of specimens from the Brownsville area (USNM collection) were collected around the turn of the century indicating that this species once common in that area.

Literature Cited

Alonso-Zarazaga, M. A. & C. H. C. Lyal. 1999. A world catalogue of families and genera of Curculionoidea (Insecta: Coleoptera). Entomopraxis, Barcelona. 315 pp.

Alsterlund, J. F. 1937. The larva of *Chalcodermus collaris* Horn with a key to related species. Proceedings of the Entomological Society of Washington 39: 216-222.

Anderson, R. S. 2002. Curculionidae Latreille, 1802, pp. 722-815, *in* Arnett, R. H., M. C. Thomas, P. E. Skelley, and J. H. Frank (eds.). American Beetles. Polyphaga: Scarabaeoidea through Curculionoidea. Volume 2. CRC Press. xiv + 1-861 pp.

Bender, S., S. Shelton, K. C. Bender, and A. Kalmbach (eds.). 2005. Texas Comprehensive Wildlife Strategy, 2005-2010. Texas Parks and Wildlife, Austin. xv + 1131 pp.

Carlow, T. A. 1997. A faunal survey and zoogeographic analysis of the Curculionoidea (Coleoptera) (excluding Anthribidae, Platypodinae, and Scolytinae) of the Lower Rio Grande Valley of Texas. unpublished thesis, Texas A&M University. xi + 1-274 pp.

Champion, G. C. 1902-1906 (1904). Biologia Centrali-Americana. Insecta. Coleoptera. Rhynchophora. Curculionidae. Curculioninae (part.). vol. 4, pt. 4. London. pp. 313-440.

Fåhraeus, O. I. von. 1837. *In* Schönherr C. J. 1837. Genera et species curculionidum, cum synonymia hujus familiae, vol. 4. pt. 1, Roret, Paris: Fleischer, Lipsiae. pp. 385-386 [reference not seen].

Heard, T. A., J. A. Burcher, and I. W. Forno. 1999. *Chalcodermus serripes* (Coleoptera: Curculionidae) for biological control of *Mimosa pigra*: host relations and life cycle. Biological Control 15: 1-9.

Heard, T. A., C. W. O'Brien, I. W. Forno, and J. A. Burcher. 1998. *Chalcodermus persimilis* O'Brien n. sp. (Coleoptera: Curculionidae): description, biology, host range, and suitability for biological control of *Mimosa pigra* L. (Mimosaceae). Transactions of the American Entomological Society 124(1): 1-11.

Hustache, A. 1936. Pars 151. Curculionidae: Cryptorrhynchinae, in S. Schenkling (ed.). Coleopterorum catalogus. W. Junk, Berlin. pp. 1-317.

Julien, M. H. and M. W. Griffiths (eds.). 1998. Biological control of weeds: a world catalogue of agents and their target weeds. Fourth edition. CABI Publishing, New York, NY. x + 233 pp.

Kissinger, D. G. 1964. Curculionidae of America north of Mexico: a key to the genera. South Lancaster, MA. Taxonomic Publications. v + 1-143 pp.

Leng, C. W. 1920. Catalogue of the Coleoptera of America, north of Mexico. John D. Sherman Jr., Mount Vernon, New York. x + 1-470 pp.

O'Brien, C. W. and G. J. Wibmer. 1982. Annotated checklist of the weevils (Curculionidae sensu lato) of North America, Central America, and the West Indies

(Coleoptera: Curculionoidea). Memoirs of the American Entomological Institute (34): i-ix + 382 pp.

Schaeffer, C. F. A. 1904. New genera and species of Coleoptera. Journal of the New York Entomological Society 12(4): 197-236.

Wibmer, G. J. & C. W. O'Brien. 1986. Annotated checklist of the weevils (Curculionidae sensu lato) of South America (Coleoptera: Curculionoidea). Memoirs of the American Entomological Institute 39: i-xvi + 563 pp.

Valid name

Conotrachelus rubescens Schaeffer

Synonymy/catalog

Constrachelus (sic) *rubescens* Schaeffer, 1904:232
Conotrachelus rubescens: Leng, 1920:332
Conotrachelus rubescens: Hustache, 1936:34
Conotrachelus rubescens: O'Brien & Wibmer, 1982:131
Conotrachelus rubescens: Carlow, 1997:116, fig. 33
Conotrachelus rubescens: Bender et al., 2005:774

Classification
Family: Curculionidae
Subfamily: Molytinae
Tribe: Conotrachelini
Classification of *Conotrachelus* and related genera has been variable. Presently *Conotrachelus* and close relatives are grouped in the tribe Conotrachelini within the subfamily Molytinae. These genera were earlier considered to be part of the Cryptorhynchinae (Hustache 1936, Kissinger 1964) which is currently recognized in a more restricted sense. This report follows the classification in Zarazaga & Lyal (1999) and Anderson (2002).

Diagnostic remarks
This is a typical molytine weevil that is not especially distinctive. Except for its small size, it could be confused with certain other members of the genus *Conotrachelus* found in the Lower Rio Grande Valley, Texas. Body length is ca. 3.0-3.6 mm with the widest point across the elytral humeri at ca. 1.7-1.9 mm. From dorsal view, it is broadest at the elytral humeri, with the sides of the elytra rather sharply tapered posteriorly. The coloration of the integument is dark reddish brown mottled with blackish, and dorsally it is covered with variably-colored, appressed hairs, ranging in places from whitish to brownish-orange. The dorsal vestiture does not form a distinctive pattern as seen in certain other *Conotrachelus* species. The base, and to a lesser extent, apex of the elytra tend to have denser concentrations of lighter-colored orange hairs, but otherwise the dorsal vestiture does not impart any particular pattern to the dorsum. The pronotal surface is irregular and deeply punctate with a narrow median raise line. The punctation of the elytra is large and deep, arranged in paired rows. Intervals 2, 4, and 6 are sharply carinate with the intervening intervals weakly carinate. The surface of the elytra lack erect setae. The eyes are widely separated in both sexes. The rostrum in repose fits into a median channel on the prosternum anterior to the procoxae. The procoxae are depressed and contiguous. The mesosternum is normal and does not receive the apex of the rostrum which remains free in repose. Sides of the prothorax are rather strongly lobed on each side covering the posterior margin of the eye. Femora are each armed below with a short triangular tooth. Tarsal claws are widely divergent, and each claw bears a large internal tooth.

The genus *Conotrachelus* is keyed in the standard keys to North American weevil genera (Kissinger 1964, Anderson 2002). There are no comprehensive keys to the North American members of this genus. Some partial regional keys exist, but they do not treat *C. rubescens*. An image of this species is available on the web: http://bugguide.net/node/view/289702 (last accessed: November 12, 2009).

Historic Occurrence Records

1) From literature: See "literature records" on attached Excel spreadsheet.

2) From specimens examined: See "specimen records" on attached Excel spreadsheet.

3) From communicated records: See "communicated records" on attached Excel spreadsheet.

Known Range

Brownsville area of Texas (Cameron County).

Biology, Host, Substrate, Habitat Data

1) From literature: None.

2) From specimens: Two specimens examined are labeled "on *Xylosoma* (sic) *flexuosa*."

3) From communicated records: Specimens of this species were collected by beating *Xylosma flexuosa* on different visits to the Palm Grove (E. G. Riley, personal observation). A specimen record communicated by R. S. Anderson includes the citation of *Xylosoma* (sic) *flexuosa* on its label.

Biology, Host, Substrate, Habitat Data by Inference (based on knowledge of related species)

The larvae of *Conotrachelus* are found in the developing fruit of their plant hosts, or in one case, in the cambium layer of an injured tree (Kissinger 1964). Several species are noted for infesting the fruit of their hosts, namely *C. crataegi* Walsh (in *Crateagus* spp.), and *C. nenuphar* (Herbst) (in *Prunus* spp.). Several species develop in nuts (walnuts and hickory nuts (Craighead 1950). Several species are associated with oaks (Anderson 2002). The apparent plant associate of *C. rubescens* is *Xylosma flexuosa* (Kunth) Hemsl. (Falcourtiaceae). This plant produces small reddish-colored fruit late in the year which is a probable breeding site.

Adult Phenology in Texas

1) Number of compiled Texas collecting events by month: April (1), May (5), June (3), July (1), August (3), September (1), October (5).

2) Year of most recent known collection in the Lower Rio Grande Valley: 1995.

Literature Cited

Alonso-Zarazaga, M. A. & C. H. C. Lyal. 1999. A world catalogue of families and genera of Curculionoidea (Insecta: Coleoptera). Entomopraxis, Barcelona. 315 pp.

Anderson, R. S. 2002. Curculionidae Latreille, 1802, pp. 722-815, *in* Arnett, R. H., M. C. Thomas, P. E. Skelley, and J. H. Frank (eds.). American Beetles. Polyphaga: Scarabaeoidea through Curculionoidea. Volume 2. CRC Press. xiv + 1-861 pp.

Bender, S., S. Shelton, K. C. Bender, and A. Kalmbach (eds.). 2005. Texas Comprehensive Wildlife Strategy, 2005-2010. Texas Parks and Wildlife, Austin. xv + 1131 pp.

Carlow, T. A. 1997. A faunal survey and zoogeographic analysis of the Curculionoidea (Coleoptera) (excluding Anthribidae, Platypodinae, and Scolytinae) of the Lower Rio Grande Valley of Texas. unpublished thesis, Texas A&M University. xi + 1-274 pp.

Craighead, F. C. 1950. Insect enemies of eastern forests. U. S. Department of Agriculture, Miscellaneous Publication No. 657. ii + 679 pp.

Hustache, A. 1936. Pars 151. Curculionidae: Cryptorrhynchinae, *in* S. Schenkling (ed.). Coleopterorum catalogus. W. Junk, Berlin. pp. 1-317 pp.

Kissinger, D. G. 1964. Curculionidae of America north of Mexico: a key to the genera. South Lancaster, MA. Taxonomic Publications. v + 1-143 pp.

Leng, C. W. 1920. Catalogue of the Coleoptera of America, north of Mexico. John D. Sherman Jr., Mount Vernon, New York. x + 1-470 pp.

O'Brien, C. W. and G. J. Wibmer. 1982. Annotated checklist of the weevils (Curculionidae sensu lato) of North America, Central America, and the West Indies (Coleoptera: Curculionoidea). Memoirs of the American Entomological Institute (34): i-ix + 382 pp.

Schaeffer, C. F. A. 1904. New genera and species of Coleoptera. Journal of the New York Entomological Society 12(4): 197-236.

Valid name

Ellescus sp.

Synonymy/catalog

Elleschus sp. Carlow, 1997:98
Elleschus sp. TAC 1: Bender et al., 2005:774

Carlow (1997 unpublished thesis) based her Lower Rio Grande Valley record of "*Elleschus* sp." on material from the Canadian Museum of Nature [CMNC] collected at Southpoint Nursery, Cameron County, Texas, that was swept from willow. The precise taxonomic status of the material to which Carlow refers is unresolved.

Robert Anderson, a weevil systematist and Curator of Coleoptera at CMNC, tracked the source of Carlow's record to two specimens that he had identified as *Ellescus* sp. He writes, … "I have two specimens labelled Southpoint Nurseries, 1.0 mi S. Southmost, 5-6.vii.1982, G. A. P. Gibson. Its not on the label but these were swept from *Salix*, I think alongside the irrigation canals (or perhaps it was the Rio Grande itself)" (personal communication to E. G. Riley, September 8, 2009). He also provided the following, .. "I have what I am quite sure is the same species from *Salix nigra*, 8 mi. S. College Station so its not a LGRV endemic. There is a lot of variation in pattern and density of elytral scales and the south Texas ones were distinct because of larger, denser scales. This whole mess could be one species" (personnal communictaion to E. G. Riley, August 6, 2008).

Ellescus likely does occur in the Lower Rio Grande Valley of Texas, but it is not commonly taken there, as no specimens of the genus were seen from the region during the preparation of this report. There are four valid species recognized in North America, and three of these are primarily northern in distribution including two that also occur in Europe. Only one species, *E. ephippiatus* (Say), is recorded from the southern states, and it is widespread, ranging from Baja California and California east to Florida, and north to British Columbia, Alberta and New York (O'Brien & Wibmer 1982).

Note: The spelling of this generic name has differed between "*Elleschus"* and "*Ellescus*." Alonoso-Zarazaga & Lyal (1999) consider the spelling "*Elleschus*" to be an unjustified emendation attributed to Schönherr, thus the original spelling of Dejean should be used.

Classification
Family: Curculionidae
Subfamily: Curculionidae
Tribe: Ellescini
The classification of this genus has been somewhat variable over the years, having been previously placed in the tribe Endaeini within the subfamily Anthonominae (Kissinger 1964) or the tribe Elleschini within the subfamily Tychiinae (Clark et al. 1977, O'Brien & Wibmer 1982). It is presently recognized in the broadly defined subfamily Curculioninae as a member of the tribe Ellescini (Zarazaga & Lyal 1999, Andseron 2002).

Diagnostic remarks

Member of this genus are small non-descript weevils, from about 2.2 to 3.0 mm in length, ovoid in shape, with the integument brown to grayish in color and usually mottled with blackish partially along the suture and transversely at apical third of the elytra. The body is generally covered with brownish to grayish scales, sometimes forming vague patterns. The rostrum is free and the eye fully exposed. There is no channel on the prosternum anterior to the front coxae, and the front coxae are contiguous. Tarsal claws are widely divergent, each armed internally with a broad basal tooth.

The genus *Ellescus* is keyed in the standard keys to North American weevil genera (Kissinger 1964, Anderson 2002).

Historic Occurrence Records

1) From literature: None.

2) From specimens examined: None.

3) From communicated records: See "communicated records" on attached Excel spreadsheet.

Known Range

Until the taxonomy and the Lower Rio Grande Valley populations of the genus *Ellescus* are better understood, the range of the species found in that region can not be established.

Biology, Host, Substrate, Habitat Data

1) From literature: None

2) From specimens: None

3) From communicated records: Two specimens swept from *Salix* along irrigation canals or the Rio Grande (R. S. Anderson, pers. com. to E. G. Riley, Sept. 8, 2009).

Biology, Host, Substrate, Habitat Data by Inference (based on knowledge of related species)

Members of the genus *Ellescus* specialize on *Salix* and *Populus* (Salicaceae) where their larvae develop in the central axis of the female catkins (Anderson, 2002).

Adult Phenology in Texas

1) Number of compiled Texas collecting events by month: July (1).

2) Year of most recent known collection in the Lower Rio Grande Valley: 1982.

Literature Cited

Alonso-Zarazaga, M. A. & C. H. C. Lyal. 1999. A world catalogue of families and genera of Curculionoidea (Insecta: Coleoptera). Entomopraxis, Barcelona. 315 pp.

Anderson, R. S. 2002. Curculionidae Latreille, 1802, pp. 722-815, *in* Arnett, R. H., M. C. Thomas, P. E. Skelley, and J. H. Frank (eds.). American Beetles. Polyphaga: Scarabaeoidea through Curculionoidea. Volume 2. CRC Press. xiv + 1-861 pp.

Bender, S., S. Shelton, K. C. Bender, and A. Kalmbach (eds.). 2005. Texas Comprehensive Wildlife Strategy, 2005-2010. Texas Parks and Wildlife, Austin. xv + 1131 pp.

Carlow, T. A. 1997. A faunal survey and zoogeographic analysis of the Curculionoidea (Coleoptera) (excluding Anthribidae, Platypodinae, and Scolytinae) of the Lower Rio Grande Valley of Texas. unpublished thesis, Texas A&M University. xi + 1-274 pp.

Clark, W. E., D. R.. Whitehead, and R. E. Warner. 1977. Classification of the weevil subfamily Tychiinae, with a new genus and species, new combinations, and new synonym in Lignyodini (Coleoptera: Curculionidae). The Canadian Entomologist 31(1): 1-18.

Kissinger, D. G. 1964. Curculionidae of America north of Mexico: a key to the genera. South Lancaster, MA. Taxonomic Publications. v + 1-143 pp.

O'Brien, C. W. and G. J. Wibmer. 1982. Annotated checklist of the weevils (Curculionidae sensu lato) of North America, Central America, and the West Indies (Coleoptera: Curculionoidea). Memoirs of the American Entomological Institute (34): i-ix + 382 pp.

Valid name

Eubulus sp.

Synonymy/catalog

Eubulus sp., nr. *bifasciculatus*: Carlow, 1997:133
Eubulus sp. TAC 1: Bender et al., 2005:774
Eubulus sp., nr. *biplagiatus*: Anderson, 2008:284

This unidentified species *Eubulus* Kirsch is probably known from a single specimen. A specimen was referenced by Carlow (1997 unpublished thesis) from the Canadian Museum of Nature Collection [CMNC] taken at the Sabal Palm Grove (Cameron County, Texas) during October. Anderson (2008) references the same specimen from the CMNC, but he recorded the date as "13-14-XI-1988." Anderson (pers. comm. to E. G. Riley, August 2009) has confirmed that the date cited in his 2008 paper is an error made during manuscript preparation. The date on the specimen label is "13-14-X-1988." Specimens of this species were not seen during the preparation of this report.

Classification
Family: Curculionidae
Subfamily: Cryptorhynchinae
Tribe: Cryptorhynchini
The classification of the genus *Eubulus* as a member of the Cryptorhynchinae and Cryptorhynchini is not controversial, as this and most of the included genera fall within the long-held definitions of these groups (Kissinger 1964, Alonso-Zarazaga & Lyal 1999, Anderson 2002).

Diagnostic remarks
Anderson (2008) provides the following statement on the characters for this species: "…has numerous erect seta-like scales dorsally, the front femur has a well-defined sharp tooth and aside from the typical oblique white elytral patch of scales, there is a tuft of black erect scales on interval 3 at the basal third. This species appears close to *E. biplagiatus* Champion."

An image of *E. biplagiatus* is available on the web: http://www.sil.si.edu/DigitalCollections/bca/navigation/bca_12_04_04/bca_12_04_04showplate.cfm?id=819 (last accessed November 13, 2009). The genus *Eubulus* is keyed in the standard keys to North American weevil genera (Kissinger 1964, Anderson 2002). Anderson (2008) provided a key to the species of *Eubulus* found in America north of Mexico, but he did not include this species.

Historic Occurrence Records

1) From literature: See "literature records" on attached Excel spreadsheet.
2) From specimens examined: None.
3) From communicated records: See "Communicated records" on Excel spreadsheet.

Known Range
Brownsville area of Texas (Cameron County). A taxonomic revision of the Mexican species of *Eubulus* is needed before the full range of this species is known.

Biology, Host, Substrate, Habitat Data

1) From literature: Carlow states "…found on dead *Bumelia lanuginosa* (Michx.) Pers." and attributes this information to "CMNC", i. e., the Canadian Museum of Nature Collection.

2) From specimens: None.

3) From communicated records: None.

Biology, Host, Substrate, Habitat Data by Inference (based on knowledge of related species)
The larvae of most cryptorhynchine weevils bore inside dead plant materials and a few are associated with living plants (Anderson 2002). Adults can be taken by beating various dead plant materials that are standing or "hung up" in dense forest habitats. Several genera are apterous (lack metathoracic wings) and inhabit forest floor debris where they can be taken by sifting and pit-fall traps. Those genera that are winged are often taken at lights (E. G. Riley, personal observation).

Adult Phenology in Texas

1) Number of compiled Texas collecting events by month: October (1).

2) Year of most recent known collection in the Lower Rio Grande Valley: 1988.

Literature Cited

Alonso-Zarazaga, M. A. & C. H. C. Lyal. 1999. A world catalogue of families and genera of Curculionoidea (Insecta: Coleoptera). Entomopraxis, Barcelona. 315 pp.

Anderson, R. S. 2002. Curculionidae Latreille, 1802, pp. 722-815, *in* Arnett, R. H., M. C. Thomas, P. E. Skelley, and J. H. Frank (eds.). American Beetles. Polyphaga: Scarabaeoidea through Curculionoidea. Volume 2. CRC Press. xiv + 1-861 pp.

Anderson, R. S. 2008. A review of the genus *Eubulus* Kirsch 1869 in the United States and Canada (Curculionidae: Cryptorhynchinae). The Coleopterists Bulletin 62(2): 287-296.

Bender, S., S. Shelton, K. C. Bender, and A. Kalmbach (eds.). 2005. Texas Comprehensive Wildlife Strategy, 2005-2010. Texas Parks and Wildlife, Austin. xv + 1131 pp.

Carlow, T. A. 1997. A faunal survey and zoogeographic analysis of the Curculionoidea (Coleoptera) (excluding Anthribidae, Platypodinae, and Scolytinae) of the Lower Rio Grande Valley of Texas. unpublished thesis, Texas A&M University. xi + 1-274 pp.

Kissinger, D. G. 1964. Curculionidae of America north of Mexico: a key to the genera. South Lancaster, MA. Taxonomic Publications. v + 1-143 pp.

Valid name

Plocetes versicolor (Champion)

Synonymy/catalog

Thysanocnemis versicolor Champion, 1902-1906 (1903):206; pl. 12, fig. 1
Thysanocnemis versicolor: Klima, 1934:4
Thysanocnemis versicolor: Blackwelder, 1947:842
Lignyodes versicolor: O'Brien & Wibmer, 1981:117
Plocetes versicolor: Clark, 1982:118; figs. 74, 75, 138, 214, 258
Plocetes versicolor: Anderson, 1991:109
Plocetes versicolor: Carlow, 1997:101
Plocetes versicolor: Bender et al., 2005:774

Classification
Family: Curculionidae
Subfamily: Curculioninae
Tribe: Tychiini
Subtribe: Lignyodina
The composition and subfamily placement for some of the "tychiine weevils" has been somewhat confused. *Plocetes* LeConte (or its junior synonym *Thysanocnemis* LeConte) has been variably placed within the Anthonominae or Tychiinae (Kissinger 1964). Clark et al. (1977) reviewed the classification of *Plocetes* and its close relatives and placed them in the tribe Lignyodini, subfamily Tychiinae, a placement that is presently accepted. However, the rank of these higher categories has changed, and they are now recognized as subtribe and tribe, respectively, within the broadly defined subfamily Curculioninae (Zarazaga & Lyal 1999, Anderson 2002).

Diagnostic remarks
This a moderate to small weevil, elongate ovoid in shape, with the dorsum densely scaled. The body length is ca. 2.3 to 3.5 mm and the maximum width at mid-elytra is ca. 1.1 to 1.8 mm. The darkest scales on the elytra form a broad v-shaped macula on the lateral portion reaching internally to the fourth interval. Posterior to this dark patch, and to a lesser extend, anterior to the dark patch, there is a vague zig-zag transverse band of pale scales. Otherwise the dorsum is composed of a mixture of grayish and brownish scales. The elytral intervals each have a sparse row of erect, thick white scales. The rostrum is free and the prosternum in front of the coxae is not channeled. The elytra are narrowly separated. The anterior margin of the prothorax is not produced into a lobe, leaving the posterior margin of the eye exposed. The tarsal claws are widely divergent, and each claw is cleft (split), armed internally with a long narrow tooth.

The genus *Plocetes* is keyed in the standard keys to North American weevil genera (Kissinger 1964, Anderson 2002) and also in Clark et al. (1977). The species is keyed in Clark (1982). An image of this species is available on the web: http://bugguide.net/node/view/270417/bgimage (last accessed: November 10, 2009).

Historic Occurrence Records

1) From literature: See "literature records" on attached Excel spreadsheet.

2) From specimens examined: See "specimen records" on attached Excel spreadsheet.

3) From communicated records: None.

Known Range

Brownsville area of Texas (Cameron County) south to Mexico (Michoacan, Nuevo Leon, Oaxaca, Tamaulipas, Veracruz), Belize and Guatemala.

Biology, Host, Substrate, Habitat Data

1) From literature: Anderson (1991) reported collecting adults from *Randia rhagocarpa* Standl. (Rubiaceae) in fruit on clay lomas east of Brownsville (Cameron County), and noted that it was reasonable to presume that this plant was the larval host for the species. He further reported collecting *P. versicolor* from fruiting *Rhandia thurberi* S. Watson in Mexico. Other data mentioned in the literature include "Cactus", "beating shrubs", and "in blacklight trap." Clark (1982) states that this species is, ... "most commonly represented in collections of Neotropical Lygnyodini, ...". He examined 35 specimens.

2) From specimens: Data from labels of specimens studied for this report include: "Cactus spp." and "on bromeliad."

3) From communicated records: Taken by beating *Rhandia rhagocarpa* with juicy ripe fruit east of Brownsville (E. G. Riley, personal observation).

Biology, Host, Substrate, Habitat Data by Inference (based on knowledge of related species)

Where known, larvae of *Plocetes* develop in the fruiting bodies of their host plants, adults of a few species having been reared directly from the seeds (Clark 1982). One species studied in Costa Rica consumed the seeds within the fruit. Pupation occurred within the fruit and the adults exited through round holes made in the wall of the fruit (Janzen & Wilson 1977). Plant associates for only a few of the 66 species of *Plocetes* are known; all are Rubiaceae (Clark 1982, Anderson 1991). Clark (1982) suggested that because the few *Plocetes* species known to be associated with Rubiaceae belonged to diverse lineages within the genus, it was likely that this relationship would prove constant for the genus. *Plocetes appendiculatus* Clark is the sister species to *P. versicolor* (Clark 1982), and it was reported by Anderson & Kovarik (1989) from Guerrero, Mexico, on *Rhandia thurberi* S. Watson (Rubiaceae). Anderson (1991) further reports collecting both *P. appendiculatus* and *P. versicolor* together in Michoacan, Mexico, on fruiting *Rhandia thurberi*.

Adult Phenology in Texas

1) Number of compiled Texas collecting events by month: April (1), October (4).

2) Year of most recent known collection in the Lower Rio Grande Valley: 2002.

Literature Cited

Anderson, R. S. 1991. A new species of *Plocetes* from the Florida Keys with notes on other species occurring in the United States (Coleoptera: Curculionidae; Curculioninae; Tychiini). Florida Entomologist 74(1): 105-110.

Anderson, R. S. 2002. Curculionidae Latreille, 1802, pp. 722-815, *in* Arnett, R. H., M. C. Thomas, P. E. Skelley, and J. H. Frank (eds.). American Beetles. Polyphaga: Scarabaeoidea through Curculionoidea. Volume 2. CRC Press. xiv + 1-861 pp.

Anderson, R. S. and P. W. Kovarik. 1989. A host plant association for *Plocetes appendiculatus* Clark (Coleoptera: Curculionidae: Tychiinae). The Coleopterists Bulletin 43(1): 68.

Bender, S., S. Shelton, K. C. Bender, and A. Kalmbach (eds.). 2005. Texas Comprehensive Wildlife Strategy, 2005-2010. Texas Parks and Wildlife, Austin. xv + 1131 pp.

Blackwelder, R. E. 1947. Checklist of the coleopterous insects of Mexico, Central America, the West Indies, and South America. Part 5. United States National Museum Bulletin 185: iv + 765-925 pp.

Carlow, T. A. 1997. A faunal survey and zoogeographic analysis of the Curculionoidea (Coleoptera) (excluding Anthribidae, Platypodinae, and Scolytinae) of the Lower Rio Grande Valley of Texas. unpublished thesis, Texas A&M University. xi + 1-274 pp.

Clark, W. E. 1982. Classification of the weevil tribe Lignyodini (Coleoptera, Curculionidae, Tychiinae), with revision of the genus *Plocetes*. Transactions of the American Entomological Society 108: 11-151.

Clark, W. E., D. R.. Whitehead, and R. E. Warner. 1977. Classification of the weevil subfamily Tychiinae, with a new genus and species, new combinations, and new synonym in Lignyodini (Coleoptera: Curculionidae). The Canadian Entomologist 31(1): 1-18.

Janzen, D. H, and D. E. Wilson. 1977. Natural history of seed predation by *Rosella sickingiae* Whitehead (Curculionidae) on *Sickingia maxonii* (Rubiaceae) in Costa Rican rainforest. The Coleopterists Bulletin 31(1): 19-23.

Kissinger, D. G. 1964. Curculionidae of America north of Mexico: a key to the genera. South Lancaster, MA. Taxonomic Publications. v + 1-143 pp.

Klima, A. 1934. Pars. 138. Tychiinae, *in* S. Schenkling (ed.). Coleopterorum catalogus auspiciis et auxilio W. Junk. Berlin and ‘s-Gravenhage. pp. 1-61. [vol. 29]

O’Brien, C. W. and G. J. Wibmer. 1982. Annotated checklist of the weevils (Curculionidae sensu lato) of North America, Central America, and the West Indies (Coleoptera: Curculionoidea). Memoirs of the American Entomological Institute (34): i-ix + 382 pp.

Valid name

Rhypasma sp.

Synonymy/catalog

Rhypasma sp. EGR 1: Bender et al., 2005:775

The record of this genus in Texas (and the United States) is based on one female specimen. Until this female can be matched with males, there is little chance of determining whether or not it represents a named or unnamed species.

Classification
Family: Tenebrionidae
Subfamily: Pimeliinae
Tribe: Stenosini (after Ferrer & Odegaard 2005)
This genus has been variably classified within the Tenebrionidae as either Lagriinae: Belopini, Pimeliinae: Stenosini, and Tenebrioninae: Scotobiini (Doyen and Lawrence 1979, Ferrer & Odegaard 2005).

Diagnostic remarks
The general body shape is narrow-elongate, parallel-sided, and depressed. The length is length 4.3 mm, and the greatest width is 1.0 mm at elytral mid-length. The body above and below is shallowly and contiguously punctate with the narrow interspaces formed into round weakly elevated granules. The color is shining dark reddish brown with traces of dull brownish tomentum remaining on the elytra. The segments of the antennae are rounded and very little thickened distally; antennomeres 8 and 9 are unmodified. The head is blunt anteriorly, nearly as wide as the pronotum. The eyes are emarginate but not divided into discrete upper and lower portions. The pro-hypomeron is without a shining impunctate area. The pronotum is narrowest at its base and only slightly narrower than the base of the elytra. The disc of each elytron has intervals 2, 4, 6, and 8 carinate for their entire length. Elytral spaces between carinae are closely punctate with the punctures more-or-less forming two regular rows. The margins of pronotum and elytral are serrate, irregularly so on the pronotum, but quite uniformly so on the elytra. Abdominal segments are without visible membranes along their posterior margins. The metacoxae are unmodified, and the tarsal formula is 5-5-4.

The genus *Rhypasma* has not been formally reported from the United States. It will key to couplet 5 in Aalbu et al. (2002), and then on in "Key II" to couplet 6 and beyond to various tribes where it clearly does not belong. Most important taxonomic characters for species separation in *Rhypasma* seem to be present only in males (modifications of the antennae, pro-hypomeron, and metacoxae). An image of the Texas specimen is available on the web: http://bugguide.net/node/view/341494 (last accessed November 19, 2009).

Historic Occurrence Records
1) From literature: None

2) From specimens examined: See "specimen records" on attached Excel spreadsheet.
3) From communicated records: None.

Known Range
Cameron County, Texas. At present, a single female specimen is known, and until the species it represents can be identified, the entire range can not be determined.

Biology, Host, Substrate, Habitat Data
1) From literature: None.
2) From specimens: The single specimen is labeled "Berlese rotten log and *Celtis* leaf litter."
3) From communicated records: The berlese sample that produced this specimen came from the Rio Grande levee directly east of the Sabal Palm Grove headquarters building. The litter was collected from under a dense stand of hackberry trees (E. G. Riley, personal observation).

Biology, Host, Substrate, Habitat Data by Inference (based on knowledge of related species). Nothing on the biology of this genus was found in the literature. This genus, like many others of the Tenebrionidae is a probably a scavenger of dead plant materials. Many specimens examined that belong to other species of the genus are labeled as having been collected at lights.

Adult Phenology in Texas
1) Number of compiled Texas collecting events by month: October (1).
2) Year of most recent known collection in the Lower Rio Grande Valley: 1993

Literature Cited
Aalbu, R. L., C. A. Triplehorn, J. M. Campbell, K. W. Brown, R. E. Somerby and D. B. Thomas. 2002. Tenebrionidae Latreille, 1802, pp. 463-509, *in* Arnett, R. H., M. C. Thomas, P. E. Skelley, and J. H. Frank (eds.). American Beetles. Polyphaga: Scarabaeoidea through Curculionoidea. Volume 2. CRC Press. xiv + 1-861 pp.

Bender, S., S. Shelton, K. C. Bender, and A. Kalmbach (eds.). 2005. Texas Comprehensive Wildlife Strategy, 2005-2010. Texas Parks and Wildlife, Austin. xv + 1131 pp.

Doyen, J. T. and J. F. Lawrence. 1979. Relationships and higher classification of some Tenebrionidae and Zopheridae (Coleoptera). Systematic Entomology 4(4): 333-377.

Ferrer, J. and F. Odegaard. 2005. New species of darkling beetles from Central America with systematic notes (Coleoptera: Tenebrionidae). Annales Zoologici 55(4): 633-661.