

## ORIGINAL ARTICLE

### New genus, new species and new records of Mexican Lygaeoidea (Hemiptera: Heteroptera)

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*Andercnemodus picachus* is described and illustrated as a new genus and species of Myodochini (Lygaeoidea) from Baja California (Mexico). The following Lygaeoidea are recorded from Mexico for the first time: *Ochrimmus foederatus* (Van Duzee) (Lygaeidae), *Thylochromus nitidulus* Barber (Drymini), *Sphragisticus nebulosus* (Fallén) (Megalonotini) and *Pseudopamera rubricata* (Barber) (Myodochini). New Mexican records of *Heterogaster behrensii* Uhler (Heterogastridae) are added.

**Keywords:** Mexico; Lygaeoidea; new genus; new species; new records

#### Introduction

Myodochini is among the most diverse of the 14 tribes of Rhyparochromidae, with 72 genera and more than 300 species occurring worldwide (Dellapé & Henry 2010). Members of the tribe are generally found on the ground, living in litter below plants, but some species climb vegetation when mature seeds are available and others habitually live above ground on weedy vegetation.

In this contribution, we describe a new genus and one new species of ground-inhabiting Myodochini, and include new records for five species collected in the state of Baja California.

#### Materials and methods

The following abbreviations are used for the institutions cited here: California Academy of Sciences, San Francisco, California, USA (CSCA); Leaf Litter Arthropods of Mesoamerica, The Evergreen State College, Washington, USA (LLAMA); San Diego Natural History Museum, San Diego California, USA (SDNHM); University of California, Riverside, California, USA (UCR); Colección Entomológica, Instituto de Biología, Universidad Nacional Autónoma de México (UNAM).

Measurements are given in millimeters.

#### Results

*Andercnemodus* n. gen.

#### Type species

*Andercnemodus picachus* n. sp.

#### Diagnosis

*Andercnemodus* n. gen. can be distinguished from the closely related genus *Cnemodus* Herrich-Schaeffer by having a shorter total head length, head not porrect and vertex globose; anterior pronotal lobe globose; fore coxae unarmed; fore femora armed with two short subapical spines; costal border of corium crenate; hemelytra sinuate; and mesepimeron not enclosed. In *Cnemodus*, the head is larger, clearly porrect and elongate, with vertex almost flat; anterior pronotal lobe flat; fore coxae armed with one stout spine; fore femora armed; costal border of corium not crenate; hemelytra not sinuate; and mesepimeron enclosed.

#### Description

Body elongate.

*Head.* Longer than wide; tylus apically globose, exceeding the juga; vertex globose; antenniferous tubercle truncate, short; antennal segment I set far from anterior margin of eye; ocelli absent; eyes small, rounded, not protruding; interocular distance exceeding postocular distance; buccular junction V-shaped, continuing posteriorly, barely raised and truncated at anterior border of eye; rostrum reaching anterior third of abdominal sternite III; rostral segment I reaching posterior margin of eye.

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**Thorax.** Pronotum longer than wide; collar well delimited, demarked posteriorly by a line-like groove with one row of punctures; anterolateral margins of anterior pronotal lobe rounded, and posterior pronotal lobe obliquely straight; anterior pronotal lobe globose, highly shining, impunctate; posterior pronotal lobe shorter, rectangular, densely punctate. Propleuron lacking a stridulitrum; mesepimeron not enclosed; metathoracic scent gland auricle elongate, curving posteriorly; evaporative area reduced, not extending beyond apex of the auricle.

**Legs.** Fore coxae unarmed; fore femur armed with two short subapical spines; middle and hind femora unarmed; tibiae unarmed.

**Scutellum.** Longer than wide; triangular; lateral margins punctate and middle third striate.

**Hemelytra.** Coleopteroid, hemelytral membrane reduced to a small flap, reaching anterior margin of abdominal sternite VII; clavus and corium fused but elements distinguishable; clavus punctuation in three or more irregular rows; corium punctate; claval commissure strongly carinate along the surface; costal margin crenate, weakly sinuate, strongly emarginated, basal third only slightly raised, apical 2/3 raised above exocorium and endocorium and reaching the highest point at level of apex of clavus; hemelytra in lateral view sinuate.

**Abdomen.** Sterna lacking a stridulitrum.

**Vestiture.** Almost glabrous; head dorsally with six elongate, upstanding setae; anterior pronotal lobe with four elongate, upstanding setae at middle third and closed to the collar; scutellum with two elongate, upstanding setae lateral to middle line; endocorium with two elongate, upstanding setae near apical third; fore femur ventrally with three elongate, upstanding setae; middle and hind femora ventrally with one or two elongate, upstanding setae; tibiae clothed ventrally with double row of semidecumbent, stout setae-like spines; tarsi densely clothed with short semidecumbent setae-like spines; abdominal sterna with few elongate, upstanding setae.

**Male.** Unknown.

### Etymology

Named for Robert Anderson, a distinguished Canadian coleopterist, and *Cnemodus* the closely-related genus. Gender masculine.

### Discussion

*Andercnemodus* n. gen. runs to couplet 6 in the key to the Myodochini of the world (Harrington 1980), where the genus *Cnemodus* Herrich-Schaeffer is identified. This new genus and *Cnemodus* are the only known

Myodochini without ocelli. In addition, both genera share a V-shaped buccular junction, and anterior collar is complete, delimited posteriorly by a sharp, deeply impressed line. *Andercnemodus* can be distinguished by having the vertex and anterior pronotal lobe globose; the fore coxae unarmed; the fore femora armed with two short subapical spines; the costal border of corium crenate; the hemelytra sinuate; and the mesepimeron not enclosed. In *Cnemodus* the vertex and anterior pronotal lobe are almost flat; fore coxae are armed, with one stout spine; the fore femur is armed, with one row of 5 to 7 spines; the costal border of corium is not crenate; the hemelytra are not sinuate; and the mesepimeron is enclosed.

*Andercnemodus picachus* n. sp. (Figure 1)

### Type material

Holotype female, Mexico, Baja California Sur, Picacho, Sierra La Laguna (23°56'318"N–110°01'337"W), 1900 m, 4 October 2010, M. G. Branstetter (UNAM). Paratype: one female, same data as holotype (UNAM).

### Description

**Female.** Dorsal and ventral surface strongly polished and shining; metathoracic scent gland auricle and evaporative area dull.

**Dorsal color.** Head and anterior pronotal lobe pale castaneous orange; antennal segments I to III pale castaneous orange, and IV with anterior half yellowish white and posterior half pale orange; posterior pronotal lobe and scutellum dark castaneous orange with punctures black to reddish brown; hemelytra with costal margin yellowish orange, punctures black to reddish brown, anterior third and inner margin along claval commissure pale castaneous orange, and the rest pale brown; hemelytral membrane dark brown; connexivum and abdominal terga reddish brown. Ventral coloration. Head, pro-, meso- and metapleuron pale castaneous orange; rostral segments I to IV (apex of IV brown), acetabulae, posterior margin of metapleuron, and legs pale yellowish orange; abdominal sterna and genital plates reddish brown; trichobothrial scars dark yellowish.

### Measurements

Head length 1.04; width across eyes 0.96; interocular distance 0.60; preocular distance 0.60; length of antennal segments: I, 1.00; II, 1.72; III, 1.44; IV, 1.48. Pronotum: Maximum length of anterior lobe 0.70; maximum length of posterior lobe 0.28; maximum

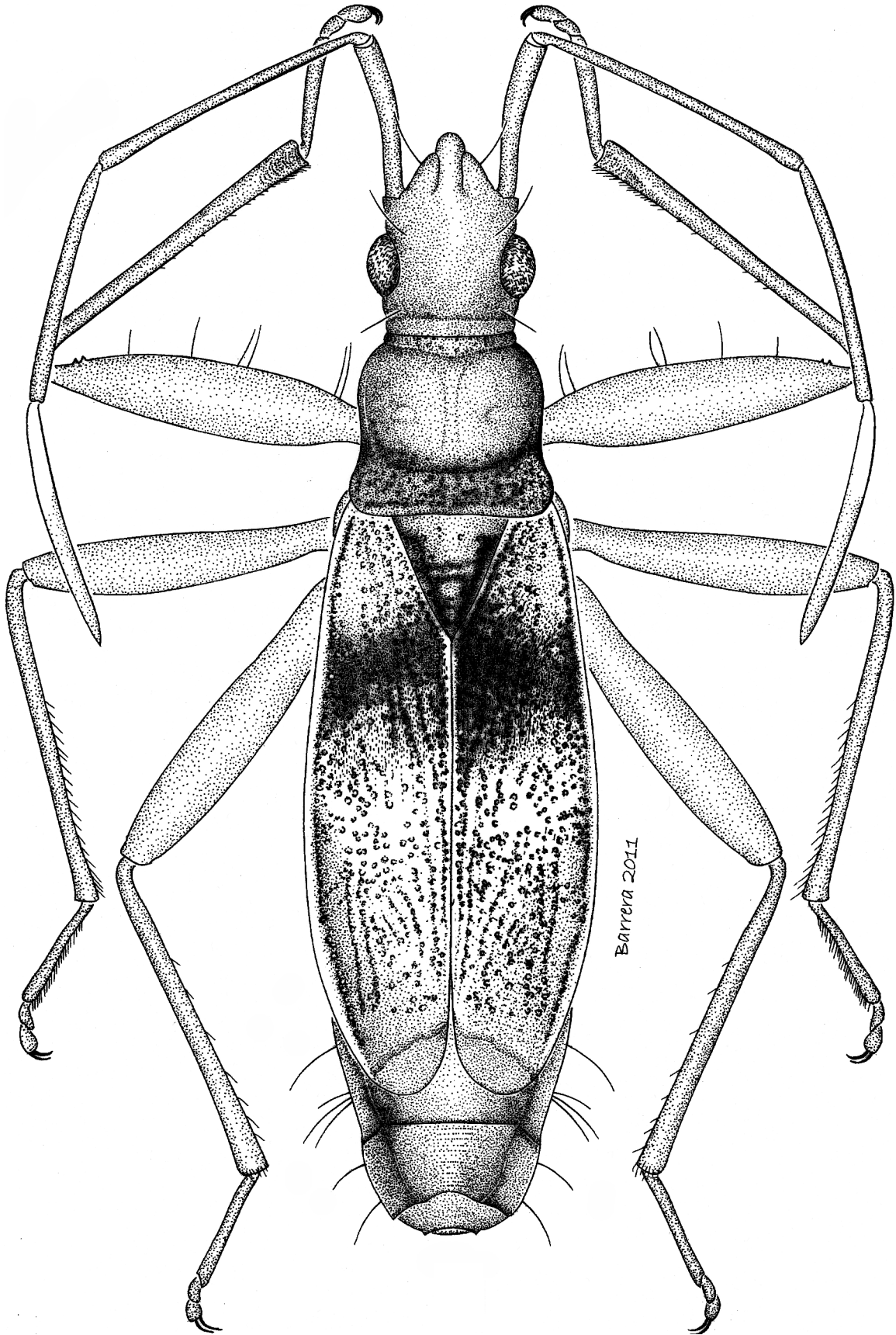


Figure 1. Dorsal view of *Andercnemodus picachus* n. sp. (female).

width of anterior lobe 0.96; maximum width of posterior lobe 1.08. Scutellar length 0.73; width 0.60. Body length 6.08.

### **Distribution**

Mexico (Baja California Sur).

### **Biology**

Collected from sifted leaf litter.

### **Etymology**

Named after Picacho, the type locality.

### **New records of *Lygaeoidea* from Baja California, Mexico**

#### **Lygaeidae**

##### ***Ochrinnus foederatus* (Van Duzee)**

Mexico, Baja California: 1 ♀, Ensenada, 2.1 mi NW Cataviña, 31°05'57"N–116°17'08"W, 25 m, 3 August 1979, A. Hardy and F. Andrews (CSCA).

Old Records. USA: Arizona, Nevada (Henry & Froeschner 1988).

#### **Heterogastridae**

##### ***Heterogaster behrensii* Uhler**

Mexico, Baja California: 1 ♂, Ensenada, 4.9 mi W Colonet, 29°44'34"N–116°17'08"W, 550 m, 9 June 1979, D. Lindsley (SDNHM); 1 ♂, Ensenada, 6 mi E Ojos Negros, 31°52'17"N–116°10'48"W, 762 m, 9 June 1980, D. Faulkner and Brown (SDNHM); 1 ♀, Ensenada, Sierra de San Pedro Mártir, entrada Parque Nacional, 31°00'01"N–115°33'24"W, 2519 m, 22 June 1979, D. Faulkner and Brown (SDNHM); 1 ♀, Ensenada, Ojos Negros, 31°57'39"N–116°17'34"W, 675 m, 26 May 1979, C. Bellamy (UCR); 3 ♂♂, 1 ♀, Ensenada, San Vicente, km 2 a Erendira, 31°22'09"N–116°16'16"W, 129 m, 18 May 2009, C. Mayorga and L. Cervantes (UNAM); 1 ♂, 1 ♀, Ensenada, km 45 a San Pedro Martir, 30°57'56"N–115°47'39"W, 129 m, 18 May 2009, C. Mayorga and L. Cervantes (UNAM); 1 ♂, 2 ♀♀, Ensenada, km 54 a San Pedro Martir, 30°58'25"N–115°46'28"W, 781 m, 18 May 2009, C. Mayorga and L. Cervantes (UNAM); 1 ♀, Ensenada, Ojos Negros, km 5 a Parque Nacional, Constitución 1857, 31°53'07"N–116°06'40"W, 968 m, 19 May 2009, C. Mayorga and L. Cervantes (UNAM); 1 ♂, Ensenada, km 55 a San Pedro Martir, 30°58'15"N–115°42'31"W, 1010 m, 16 May 2009, C. Mayorga and L. Cervantes (UNAM); 3 ♂♂, 4 ♀♀, Ensenada, km 62 a San Pedro Martir, 30°57'25"N–115°41'02"W, 1096 m, 16 May 2009,

C. Mayorga and L. Cervantes (UNAM); 1 ♂, Tecate, 14.2 mi S Tecate, 32°22'38"N–116°36'50"W, 282 m, 29 May 1980, D. Faulkner and Brown (SDNHM); 1 ♂, Tecate, 8 mi E Tecate, 32°32'58"N–116°29'26"W, 720 m, 29 May 1980, D. Faulkner and Brown (SDNHM); 1 ♂, Tecate, (UNAM). km 46 Tecate-Ensenada, 32°18'58"N–116°33'34"W, 418 m, 5 March 2010, C. Mayorga and L. Cervantes (UNAM).

Old records. Canada, USA, and Mexico (Wheeler & Hoebeke 2010). Mexico: Baja California, Cape of St. Lucas (Uhler 1894).

#### **Rhyparochromidae**

##### **Myodochini**

##### ***Pseudopamera rubricata* (Barber)**

Mexico, Baja California: 1 ♂, Ensenada, 2.1 mi S Rosarito, 32°19'34"N–117°02'57"W, 19 m, 23 March 1981, D. Faulkner and Brown (CSCA).

Old records. USA: Arizona, California, Utah (Henry & Froeschner 1988).

##### **Megalonotini**

##### ***Sphragisticus nebulosus* (Fallén)**

Mexico, Baja California: 1 ♂, Ensenada, km 75 a San Pedro Martir, Aguaje, 30°59'18"N–115°36'18"W, 1775 m, 18 May 2009, C. Mayorga and L. Cervantes (UNAM).

Old records. Canada, USA, North Africa, and Europe (Henry & Froeschner 1988).

##### **Drymini**

##### ***Thylochromus nitidulus* Barber**

Mexico, Baja California: 2 ♂♂, 3 ♀♀, Ensenada, Parque Nacional Constitución 1857, km 3 a Ojos Negros, 32°00'35"N–115°56'52"W, 1624 m, 20 May 2009, C. Mayorga and L. Cervantes (UNAM); 1 ♂, Ensenada, km 76 a San Pedro Martir, Aguaje, 30°58'04"N–115°35'09"W, 2947 m, 4 March 2010, C. Mayorga and L. Cervantes (UNAM).

Old records. USA: California, Oregon (Henry & Froeschner 1988).

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