

A NEW TOE BITER FROM MEXICO  
(BELOSTOMATIDAE, HEMIPTERA)

By A. S. MENKE<sup>1</sup>

ABSTRACT: A new species of *Abedus*, subgenus *Abedus*, from the Mexican states of Sonora and Jalisco is described and named *A. parkeri*. The relationships with *A. breviceps* and *A. signoreti sonorensis* are discussed.

Recent collecting trips in northwestern Mexico have produced a new species of the genus *Abedus*, subgenus *Abedus*. The material studied is in the Los Angeles County Museum of Natural History (LACM) which includes the A. S. Menke Collection (ASM). Terminology used follows Menke (1960).

***Abedus parkeri*** Menke, new species  
Figures 2a, b; 3a, b

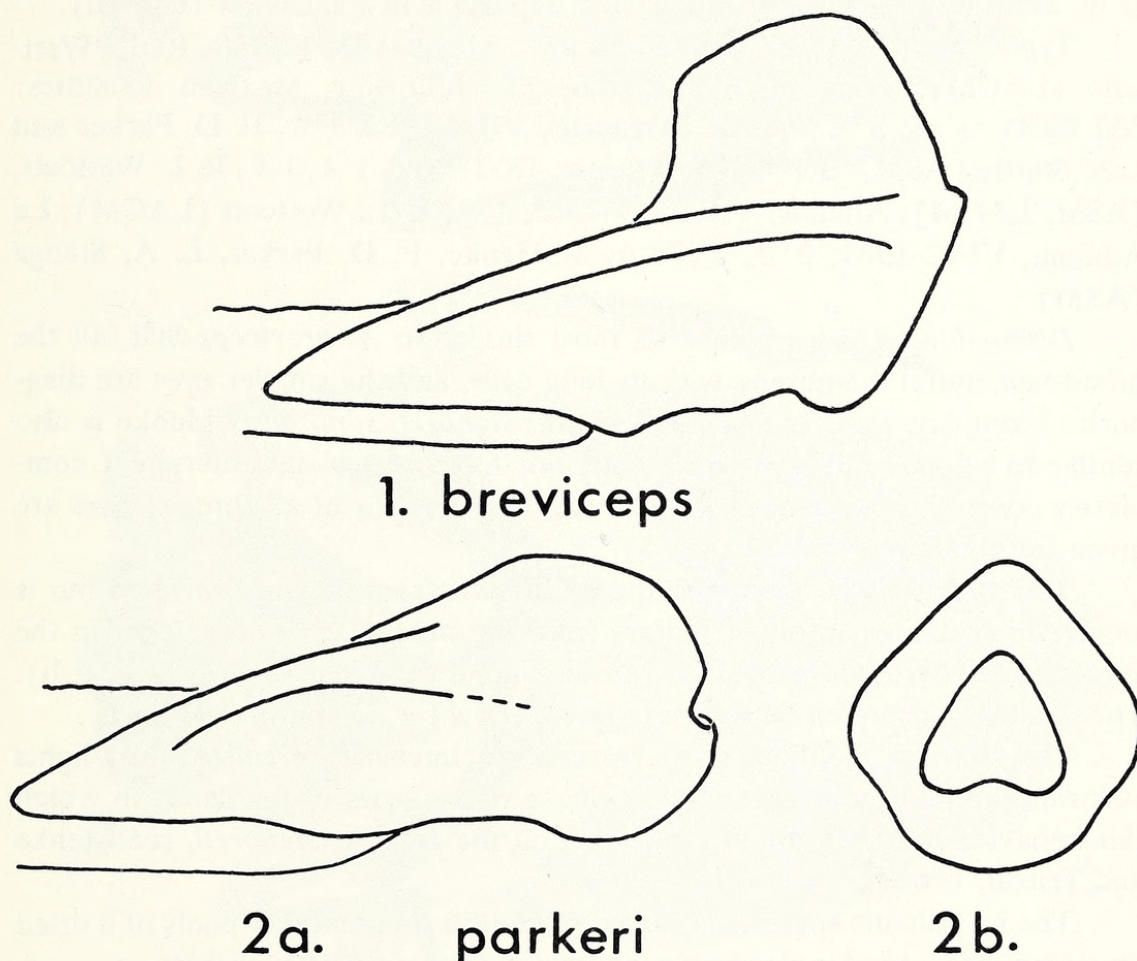


Figure 1. Phallus of *Abedus breviceps* Stål, lateral view.

Figure 2. Phallus of *Abedus parkeri* Menke, new species. A, Lateral view; B, Apical view.

<sup>1</sup>Department of Entomology, University of California, Davis.



*Holotype* ♂: 25.5 mm. long, 14 mm. wide.

*Head*: Eye slightly flattened externally, slightly higher than interocular space; eye width about one-half interocular distance; length of tylus before eye slightly more than one half eye length; antenna with four segments, II and III with long finger-like processes.

*Hemelytron*: Embolial fracture present; membrane broad with seven elongate cells, (fig. 3a), width (including translucent margin) slightly greater (one third greater in females) than median length of posterior lobe of pronotum; apex of hemelytron broadly rounded.

*Abdominal venter*: Hair pattern as in *Abedus breviceps* (see Menke, 1960, fig. 39).

*Air strap*: As in *breviceps* (see Menke, 1960, fig. 11) except somewhat narrower.

*Phallus*: Opening of ejaculatory duct heart shaped (Fig. 2b); roof over duct, a broadly rounded triangular ridge; lateral wings strong posteriorly (Fig. 2a), disappearing before apex and not visible in apical view (Fig. 2b).

*Types*: Holotype ♂, Alamos, Sonora, Mexico, IX-1-1960, R. L. Westcott (LACM). Nine paratypes from the following Mexican localities: JALISCO: 3 mi. S.E. Plan de Barrancas, VII-8-1963, 1 ♂, F. D. Parker and L.A. Stange (ASM). SONORA: Alamos, IX-1-1960, 1 ♂, 1 ♀, R. L. Westcott, (ASM, LACM); Alamos, VII-16-17-1963, 1 ♀, R. L. Westcott (LACM); La Aduana, VI-12-1961, 3 ♂, 2 ♀, A. S. Menke, F. D. Parker, L. A. Stange (ASM).

*Discussion*: *Abedus parkeri* is most similar to *A. breviceps* Stål but the broad hemelytral membrane with its long cells, and the smaller eyes are diagnostic (compare Figs. 3a and 4a). *Abedus signoreti sonorensis* Menke is also similar to *parkeri* but *sonorensis* does not have ventral laterotergite I completely covered by appressed pubescence. Photographs of all three species are given for comparison (Figs. 3 to 5).

The phallus of *A. parkeri* is quite different from that of *breviceps* but is similar to that of *signoreti*. It differs from the phallus of *A. breviceps* in the short, basal lateral wings which are not evident in apical view (Figs. 2a, b). The phallus of *breviceps* is shown in lateral view for comparison (Fig. 1).

The Alamos and Plan de Barrancas specimens were collected at lights according to their collectors. This is the second species of the genus in which this behavior has been noted (for notes on the first, *A. signoreti*, see Menke and Truxal, 1966).

The La Aduana specimens were collected in small muddy pools of a dried up stream bed. *Abedus signoreti sonorensis* were found with *parkeri*.

This species is named in honor of Frank D. Parker, one of its collectors.

Based on my 1960 key to the species of *Abedus*, *A. parkeri* will run to couplet 4. The following changes in the key should be made (figures refer to those found in the 1960 revision):





Figure 3. *Abedus parkeri* Menke, new species, holotype. A, Dorsal view; B, Ventral view.



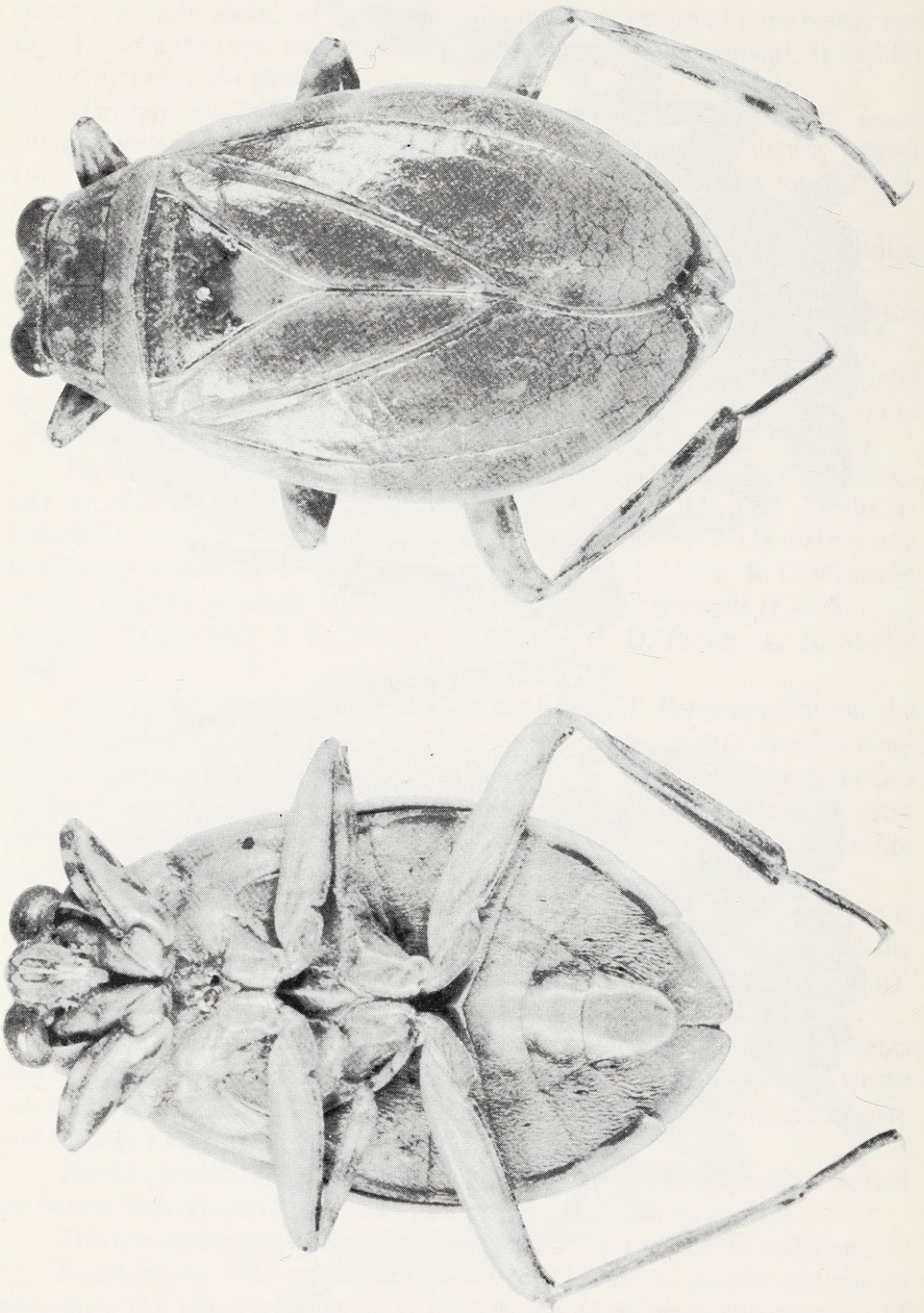


Figure 4. *Abedus breviceps* Stål. A, Dorsal view; B, Ventral view.



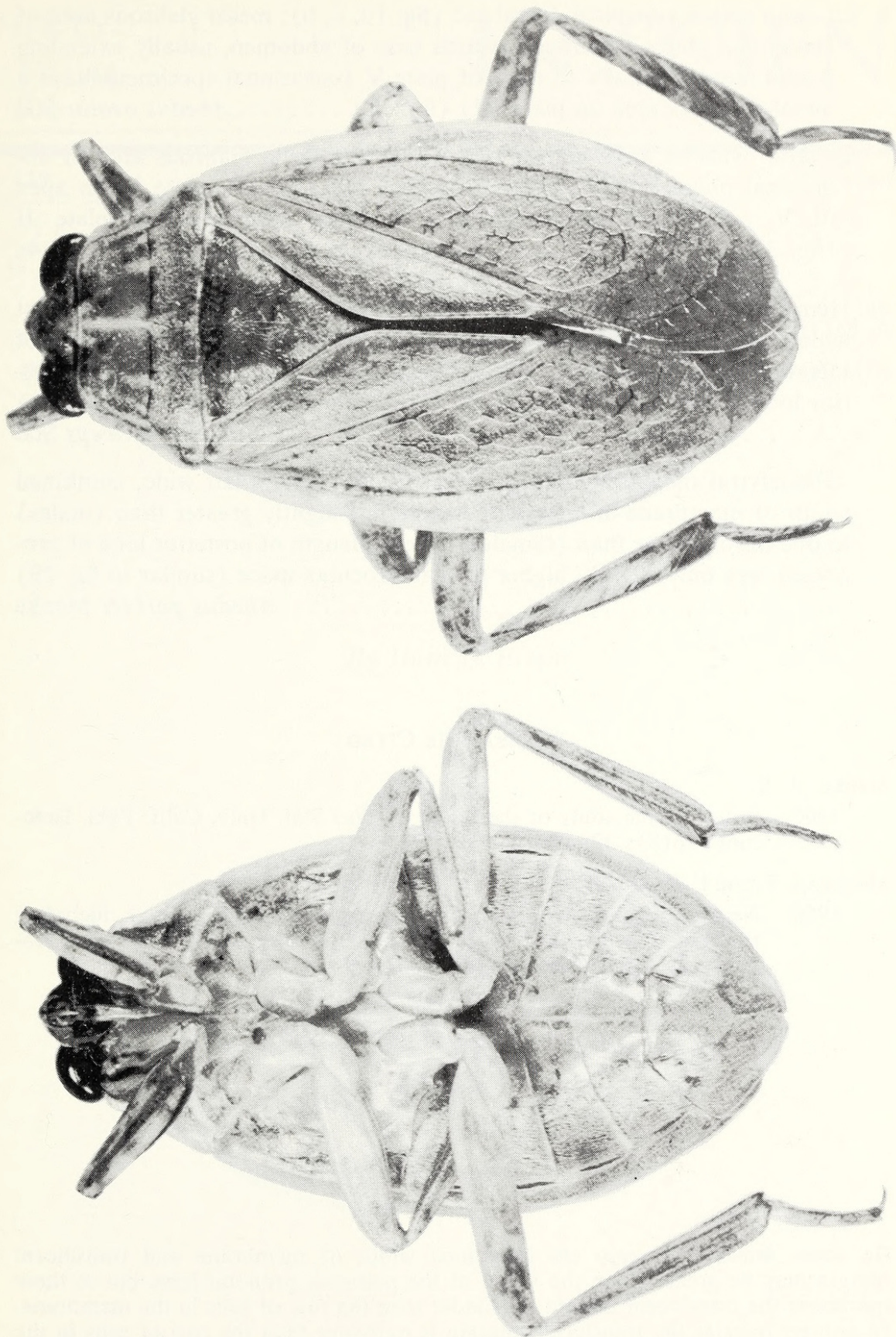


Figure 5. *Abedus signoreti sonorensis* Menke. A, Dorsal view; B, Ventral view.



Menke, Arnold S. 1966. "A new toe biter from Mexico (Belostomatidae, Hemiptera)." *Contributions in science* 118, 1–6.

<https://doi.org/10.5962/p.241107>.

**View This Item Online:** <https://www.biodiversitylibrary.org/item/214245>

**DOI:** <https://doi.org/10.5962/p.241107>

**Permalink:** <https://www.biodiversitylibrary.org/partpdf/241107>

#### **Holding Institution**

Smithsonian Libraries and Archives

#### **Sponsored by**

Biodiversity Heritage Library

#### **Copyright & Reuse**

Copyright Status: In Copyright. Digitized with the permission of the rights holder

Rights Holder: Natural History Museum of Los Angeles County

License: <https://creativecommons.org/licenses/by-nc-sa/4.0/>

Rights: <https://www.biodiversitylibrary.org/permissions/>

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.