A NEW TOE BITER FROM MEXICO
(BELOSTOMATIDAE, HEMIPTERA)

By A. S. Menke
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Editor
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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

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

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

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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).


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.
4. Air strap with a subapical dorsal sac (fig. 10, a, b); mesal glabrous area of abdominal plates narrowed towards base of abdomen, usually extending from base of plate IV to apex of plate V (occasional specimens have a mesal glabrous area on plate III) (fig. 38) .......... Abedus ovatus Stål

Air strap without a dorsal sac (fig. 11, a, b); mesal glabrous area of abdominal plates broad, usually extending from base of plate III to apex of V (occasional specimens have a mesal bare area on plate II (fig. 39) ......................................................... 4a

4a. Hemelytral membrane narrow, cells narrow or poorly defined, largest wider than high, or at most square (some females), combined width of membrane and translucent margin about equal to median length of posterior lobe of pronotum; eye much higher than interocular space (fig. 33) ...................................................... Abedus breviceps Stål

Hemelytral membrane broad, largest cells longer than wide, combined width of membrane and translucent margin slightly greater than (males) to one third greater than (females) median length of posterior lobe of pronotum; eye only slightly higher than interocular space (similar to fig. 29) ...................................................... Abedus parkeri Menke

Literature Cited

Menke, A. S.

Menke, A. S. and F. S. Truxal

In some female breviceps the combined width of membrane and translucent margin may be greater than the width of the posterior pronotal lobe, but in these specimens the translucent margin is broader than the row of cells in the membrane. In parkeri females the translucent margin is narrower than the row of cells in the membrane.