

A NEW BUENOA FROM FLORIDA
(HEMIPTERA: NOTONECTIDAE)

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ABSTRACT

A new species of back swimmer, *Buenoa marki*, is described from the Everglades National Park, Florida.

Buenoa marki Reichart, new species

Size: Male, length 5.00 to 5.50mm; greatest body width 1.35 to 1.60mm; female, length 4.90 to 5.70mm; greatest body width 1.40 to 1.65mm.

Color: General appearance glistening, sordid white to pale stramineous. Basal portion and ventral margins of corium brown. Legs testaceous. Abdomen ventrally brown except keel, and portions of connexivum light brown.

Male structural characteristics: As viewed from above, outline of head laterally rounded, anteriorly truncate with vertex slightly indented at margins of eyes; greatest width of head 6 times the anterior width of vertex and equal to humeral width of pronotum; synthlipsis approximately one-third the anterior width of vertex; along median longitudinal axis, head is approximately three-fourths length of pronotum; notocephalon slightly carinate; tylus slightly inflated; labrum basal width two-fifths greater than median length with apex bluntly rounded; rostral prong (Fig. 2) longer than third rostral segment, with base originating laterally near proximal end of segment 3, and with apex bluntly acuminate. Pronotum with its median length slightly less than $\frac{1}{2}$ its humeral width; disk with depressed areas laterally and thus appearing faintly tricarinate; lateral margins divergent; posterior margins convex; medially slightly concave. Scutellum large with median length approximately two-fifths greater than median length of pronotum; apex and adjacent lateral margins distinctly raised. Fore femur (Fig. 1) narrower at apex than at base; stridulatory area (Fig. 4) consisting of approximately 27 to 29 sclerotized ridges (some bifurcate) which at apex become abruptly disoriented into a jumble of ridges extending outward at right angles from the main body of generally parallel ridges. Fore tibia (Fig. 1) with stridulatory comb (Fig. 3) consisting of approximately 28 teeth; apical 6 to 7 teeth thicker but only slightly taller than basal. Chaetotaxy of male fore leg as shown in Fig. 1. Male genital claspers as shown in Fig. 5a, 5b.

Female structural characteristics: As viewed from above, head outline laterally rounded, anteriorly truncate with vertex only slightly indented at eye margins; greatest width of head 6 times the anterior width of vertex and equal to humeral width of pronotum; synthlipsis one-third the anterior width of vertex; along median longitudinal axis head four-fifths length of pronotum; tylus slightly inflated. Median pronotal length slightly

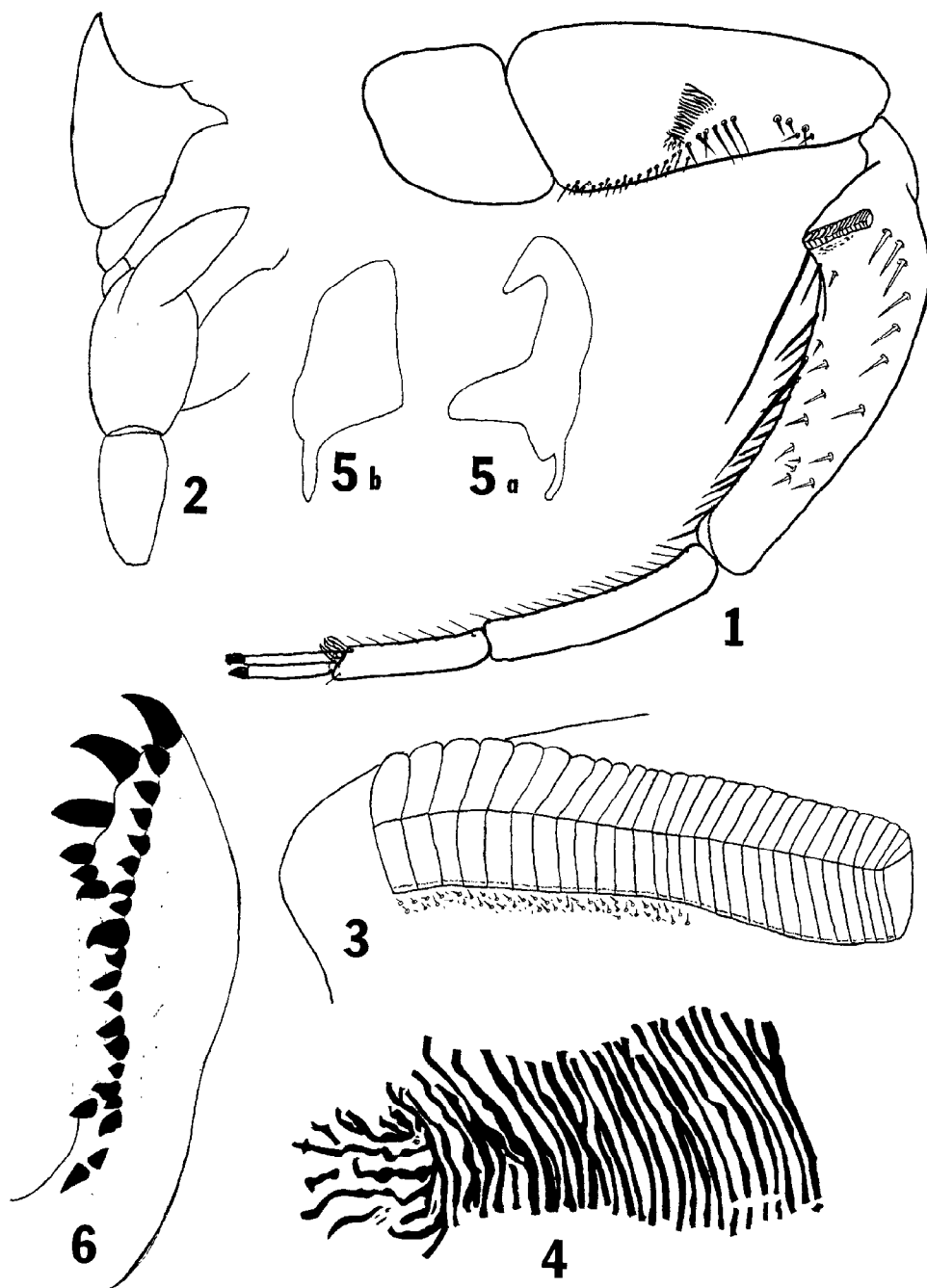


Fig. 1-6: *Buenoa marki* n.sp.; 1) inner surface of male left fore leg; 2) left lateral view of male rostrum and tylus; 3) enlarged view of left tibial stridulatory comb; 4) enlarged view of stridulatory area on femur; 5a) right genital clasper; 5b) left genital clasper; 6) laterodorsal view of left ovipositor valve.

more than three-sevenths its humeral width; disk slightly impressed laterally with faint median carina; lateral margins divergent; posterior margins slightly convex; medially, shallowly concave. Scutellum large, with median length distinctly greater than that of pronotum; apex and adjacent lateral margins distinctly raised. Ovipositor valves (Fig. 6) of normal shape; teeth arranged in 2 longitudinal rows only in distal third of length; 3 large teeth (1 terminal and 2 in inner row) followed by 3 smaller teeth extending mediad; the long outer row consists of approximately 19 medium-sized teeth.

Comparative notes: Superficially this species keys out to *B. mutabilis* in Truxal's (1953) key. Examination of the male foreleg shows distinct differences: i.e. *marki* has 27 to 29 sclerotized stridulatory ridges (some bifurcate) compared to 10 to 18; in having 27 to 28 teeth in the tibial comb as compared to 33 to 38; and in the chaetotaxy of the fore tibia which has an inner row of 6 to 9 small spines slanting obliquely towards the terminal spine in the outer marginal row of 9. In these structures it resembles no other Florida or Caribbean species.

Location of types: Holotype male, allotype female, 15 male and 33 female paratypes, 36 nymphs, Pineland trail, Everglades National Park, Florida, 8 July 1970, C. V. Reichart and Mark E. Pion. The holotype and allotype, 2 paratype males and 3 paratype females deposited in the National Museum of Natural History, Washington, D. C.; 2 paratype males and 3 paratype females, University of Miami Museum, Coral Gables, Florida; 2 paratype males and 3 paratype females, Florida State Collection of Arthropods, Gainesville, Florida; 2 paratype males and 3 paratype females, Los Angeles County Museum of Natural History, Los Angeles, California; the remaining paratypes and nymphs are in the collection of the author.

ACKNOWLEDGMENTS

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LITERATURE CITED

Truxal, Fred S. 1953. A Revision of the Genus *Buenoa* (Hemiptera-Notonectidae). Univ. Kans. Sci. Bull. Pt. II, no. 11, 1351-1523.

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