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Gnathobleda litigiosa, an Austral Assassin Bug New to
the Virginia Fauna (Heteroptera: Reduviidae)

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ABSTRACT

The assassin bug *Gnathobleda litigiosa* Stål, a species that rarely is collected in the United States, is reported from Virginia for the first time, representing a northern range extension from southeastern Georgia and the first record of the genus in the state.

Key words: *Gnathobleda*, Reduviidae, Virginia.

One almost certain way to increase the known fauna of any given region is to publish an account of that fauna that pretends some measure of completeness. The

first author's recent synopsis of the assassin bugs of Virginia (Hoffman, 2006) treated 46 species known to occur, with the qualification that as many as ten more

might eventually be added. To his surprise, the newest documented member of this family in the state was not on the list of hypothetically probable species, and it was found so soon after the publication of the monograph. We herewith document the occurrence of a member of the subfamily Stenopodainae, which also adds another genus to the 27 already known in Virginia. This insect is *Gnathobleda litigiosa*, described by Carl Stål in 1862 from specimens taken in Mexico and subsequently recorded from Central America, West Indies, and southern United States. While conducting a survey of the moths of False Cape State Park in 2005, the second author accumulated large series of insects via blacklight trapping, including the following two specimens of *G. litigiosa*:

City of Virginia Beach: False Cape State Park, Wash Woods Environmental Education Center, 6-7 July 2005, S. M. Roble leg., 2 females (VMNH).

Under the name *G. tumidula* (now considered a junior synonym of *G. litigiosa*), Uhler (1876) stated that the species "Inhabits Texas, Cuba, &c.," Van Duzee (1917) listed Georgia and Texas, and Blatchley (1926) recorded it from Florida, Georgia, Texas, and Cuba. The more recent revision of *Gnathobleda* by Giacchi (1977) cited specimens (all in AMNH) of *G. litigiosa* from Texas, Louisiana, Alabama, Florida (including "Baton Rouge, Flda.," presumably in error for the locality of the same name in Louisiana), Cuba, Puerto Rico, Guatemala, and the Mexican states of Nayarit and Oaxaca, outlining a distribution around the Gulf of Mexico. Froeschner (1988) listed the same three states as Blatchley (1926), apparently overlooking Giacchi's (1977) report of records for Alabama and Louisiana. The National Museum of Natural History has a total of 26 specimens (last one collected in 1965 in Texas, all others 1941 or earlier) of *G. litigiosa* from Alabama, Arkansas, Florida, Louisiana, and Texas, plus 34 more from Cuba, Mexico (states of Oaxaca, Tabasco, and Veracruz), El Salvador, Guatemala, Costa Rica, Panama, and Argentina. The species has not been collected in North Carolina to date (R. Blinn, pers. comm.). Several Oklahoma specimens are housed in the Oklahoma State University collection (Arnold, no date).

In extending the known range of *G. litigiosa* northward by some 840 km (520 miles) (Fig. 1), the capture of specimens in southeastern Virginia adds substance to the already well-known subtropical aspect of that region. It is worthy of mention that the extensive trapping at False Cape State Park produced, besides the two specimens of *G. litigiosa*, only a dozen or so individuals of *Pnirontis modesta*, of the several other common reduviids that would be expected or known to occur there. Among the latter, *Pnirontis languida* is a notable absentee, having been collected in the park

twice (May and August of 1998) by staff of the Virginia Department of Conservation and Recreation's Division of Natural Heritage. By contrast, Hoffman (2006) had no records for *P. modesta* east of the Suffolk scarp.

The key to genera of Stenopodainae in Virginia (Hoffman, 2006: 19) requires modification of the final couplet as follows to accommodate *Gnathobleda*:

5. Front and rear lobes of head about equal in length; genae projecting beyond end of tylus; ocelli inconspicuous; apex of female abdomen acutely elongated *Gnathobleda*
 – Front lobe of head nearly twice length of rear lobe; genae not attaining apex of tylus; ocelli large, placed on conspicuous median tubercle; apex of female abdomen subtriangular 6

6. Profemora incrassate, with ventral row of spines; metatibial setae short, declivent except at distal fourth; anterior pronotal projection short, bluntly triangular *Oncocephalus*
 – Profemora scarcely thicker than mesofemora and without ventral spines; metatibiae clothed in long setae standing perpendicular to tibial surface over entire length, about 3X as long as tibial diameter *Narvesus*

Giacchi (1977) published habitus sketches of *Gnathobleda fraudulenta*, which closely resembles *G. litigiosa*, and Champion (1898-1899) published drawings of both species. Photographs of the holotype of the latter species are also available on-line (Swedish Museum of Natural History, 2006). We provide here additional drawings of a Virginia specimen of *G.*

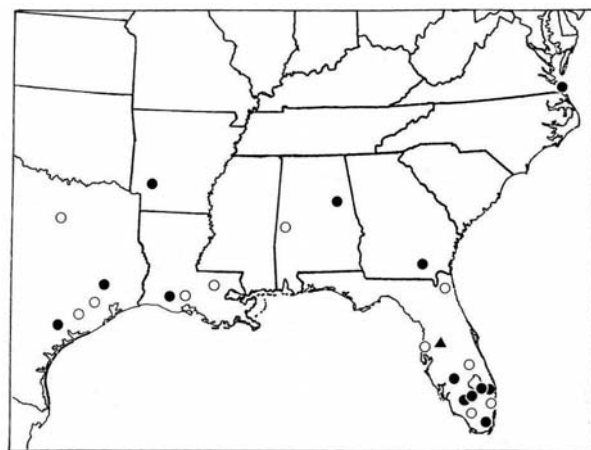


Fig. 1. United States distribution of *Gnathobleda litigiosa* based on literature records (Blatchley, 1926, 1928; Elkins, 1951; Giacchi, 1977; open circles), on-line photographs (BugGuide.net; triangle), and previously unpublished records from museum collections (closed circles).

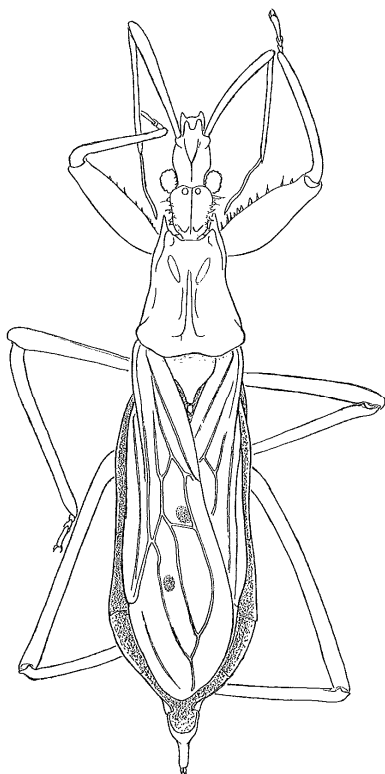


Fig. 2. Dorsal habitus of adult female *Gnathobleda litigiosa* from False Cape State Park, City of Virginia Beach, Virginia.

litigiosa as a further aid in recognition (Figs. 2 and 3).

The discovery of *Ctenotrachelus shermani* at Virginia Beach in 1989 (Hoffman, 2004), and of *Gnathobleda litigiosa* in 2005, encourages the expectation that one more stenopodaine genus, *Diaditus*, which occurs sparingly along the Gulf Coast (McPherson et al., 1978; Blinn, 2009), also may be awaiting discovery in southeastern Virginia.

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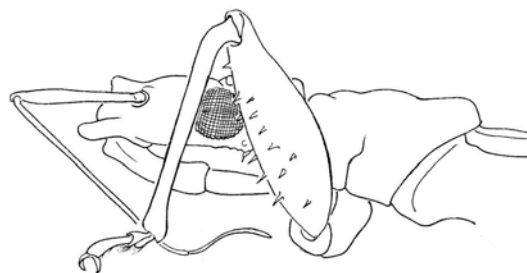


Fig. 3. Lateral view of anterior end of adult female *Gnathobleda litigiosa* from False Cape State Park, City of Virginia Beach, Virginia.

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