A NEW GENUS AND SPECIES OF TURTLE BUG FROM SOUTHERN FLORIDA (HEMIPTERA: PENTATOMIDAE)[1]

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ABSTRACT

A new genus and species (*Neapodops floridanus*) of turtle bug are described from Everglades National Park, Florida.

The turtle bugs form the tribe Podopini of the pentatomid subfamily Graphosomatinae. The tribe was revised for North America by Barber and Sailer in 1960. In the present paper we describe an additional genus and species from southern Florida.

Although the biology of most species remains poorly known or completely unknown, Barber and Sailer (ibid.) point out that " . . . all members of the tribe live in or near marshes among the roots of clumps of grass or sedge . . . and along the margins of ponds, sloughs and streams." The species discussed below appears to live in a similar habitat (see species discussion).

Neapodops new genus

Head wider across eyes than long; eyes non-stylate or at most very slightly pedunculate; juga tapered anteriorly, barely reaching apex of tylus at mesal margin; antenniferous tubercles blunt, scarcely visible from above, down curved, apex not visible in dorsal view; vertex strongly convex mesally but nearly evenly raised from eye to median line, not produced as a distinct ridge; preocular area of head considerably wider than long; no spine present laterally immediately in front of eye, ocelli set well behind a line drawn across posterior margin of eyes, set nearly twice as far from one another as each is removed from an eye; antennae five segmented, short, only slightly longer than head; labium extending nearly to posterior margin of mesocoxae; pronotum more than twice as wide as long, a shallow transverse impression behind anterior "collar," a deep prominent complete impression across center or disc, area between impressions slightly swollen on meson, area of cicatrices prominently swollen but not distinctly tuberculate, lateral margins sinuate, carinate and narrowly explanate, margin entire, non-serrate, antero-lateral angles with a short subacute process extending slightly laterad of compound eye, prehumeral tooth short and stout, not prominent and not extending laterad of humeri; scutellum more than two thirds as wide as long, surface with coarse foveate punctures basally, central elevated area smooth and almost completely impunctate, laterally with smaller but conspicuous punctures; lateral corial margins arcuate, extending noticeably laterad of humeral angles for most of length, connexivum very narrowly exposed laterad; posterior coxae well sepa-

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rated, metasternum lacking a distinct carina, but somewhat produced; legs short; pruinose evaporative area small and trianguloid with a transversely raised subelliptical plate in center, evaporative area not extended onto mesopleuron, a deep lunate furrow present near posterior margin of mesopleuron, dorsal surface with only a scattering of very short inconspicuous setae, appearing nearly glabrous, lacking elongate upstanding hairs; abdominal venter punctate only laterally, punctures never extending midway onto meson from lateral margins.

Type species: *Neapodops floridanus* n. sp. Monobasic (Fig. 1)

Superficially this genus most closely resembles *Allopodops* Harris and Johnston. Both genera have a similar habitus with the lateral pronotal

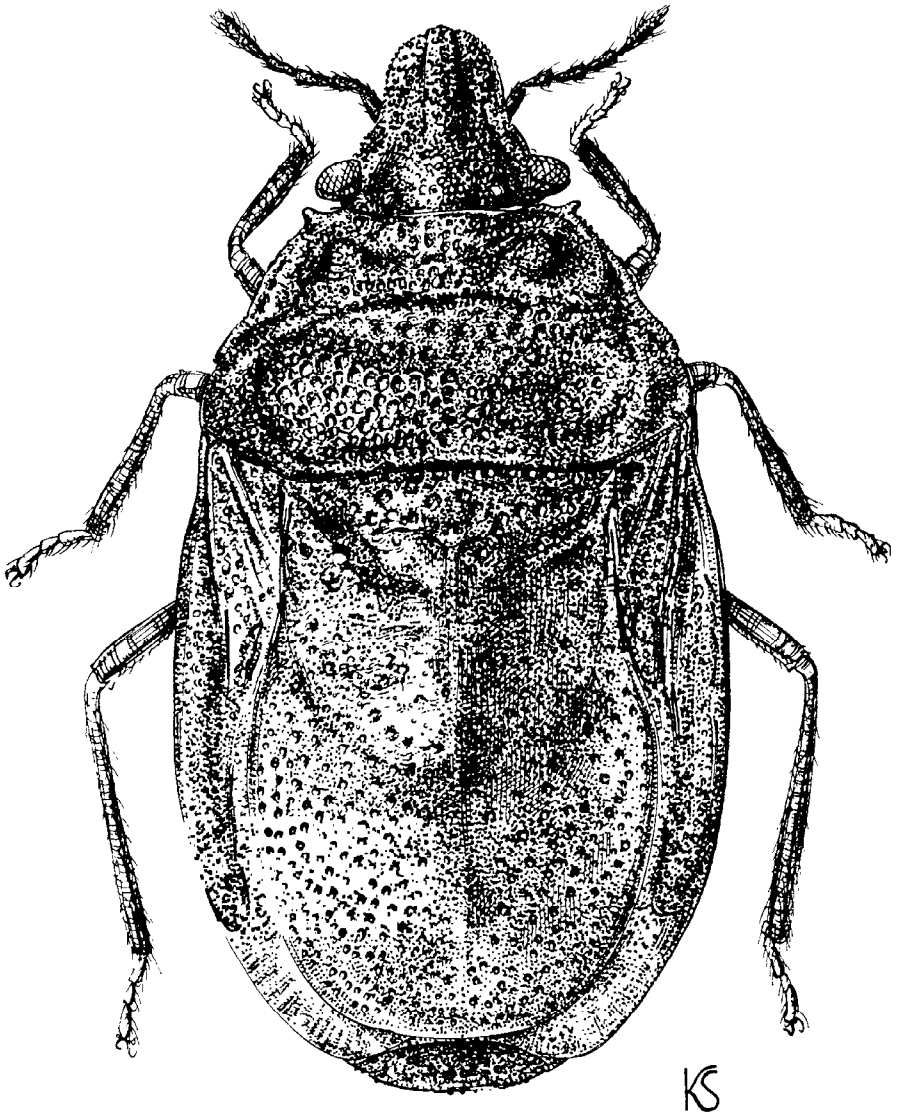

Fig. 1. Dorsal view of *Neapodops floridanus*, holotype.

and head margins generally tapering along the same plane to give an acuminate appearance to the body anteriorly; a similar dark coloration with black femora and tibiae; similarly swollen but non-tuberculate cicatrices; broadly arcuate corial margins; reduced punctures on the mesal raised area of the scutellum; well separated hind coxae and almost non-pedunculate eyes. The two genera are easily separable by *Neapodops* lacking serrated lateral pronotal margins, lacking a tubercle immediately before the eyes, possessing 5 rather than 4 segmented antennae and lacking elongate hairs on the dorsal surface.

In the generic key of Barber and Sailer (1960) *Neapodops* will key to couplet 4 where it agrees with *Weda* Schouteden in not having contiguous posterior coxae and with *Amaurochrous* Stal in lacking a metasternal carina and in not having the juga exceeding the tylus. The separation of *Weda* and *Amaurochrous* in the Barber and Sailer key is only in part satisfactory as the hind coxae in *Amaurochrous magnus* B. & S. are not contiguous and the juga (as noted by Barber and Sailer) do exceed the tylus in several species of *Amaurochrous*. From *Weda* the present genus is separable by the former possessing juga which always much exceed the tylus and are contiguous before it, and by *Neapodops* lacking a metasternal carina. *Amaurochrous* is readily separable from *Neapodops* by possessing evenly and thickly placed punctures over the entire scutellar surface, definite tubercles on the raised pronotal cicatrices, a distinct angle formed by the lateral pronotal and head margins, the cinereous rather than black coloration, with legs usually banded or spotted with cinereous, punctures on abdominal venter present nearly to meson or at least considerably more than midway from lateral margins to meson, and by the generally nearly contiguous hind coxae.

Neapodops floridanus new species

Length female: 4.62 mm; black, subshining, becoming cinereous broadly on lateral and distal portions of scutellum, entire corium, an ovoid spot near middle of mesopleuron and an irregular area near dorso-caudad angle of metapleuron; abdominal sternum laterally with a broad testaceous to cinereous stripe thickly sprinkled with darker brown punctures, extreme lateral margins of sternum dark brown with posterior 1/3 of margin of each segment contrastingly flavescent, remainder of sternum black; tarsi testaceous, strongly contrasting with uniformly black femora and tibiae; pronotum becoming dark red-brown on humeral angles and on swollen areas immediately mesad on posterior lobe.

Head with strongly convexly raised mesal area becoming depressed anteriorly on tylus, juga flattened, coarsely punctate; length head .95, width across eyes 1.25, interocular space .87, interocellar distance .61, distance ocellus to inner compound eye margin .30; pronotum strongly transverse, coarsely foveately punctate; length pronotum 1.10, width 2.38; scutellum broadly "U" shaped, broadest posterior to middle, not attaining end of abdomen, noticeably convex but without a definite median ridge; length scutellum 2.42, maximum width 1.97; length corium 2.08; legs short, femora mutic, hind femora not extending posteriorly beyond 4th abdominal sternum; length labial segments I .57, II .46, III .38, IV .38; antennae short, stout, terete or very slightly clavate distally with 5th segment strongly

ovately fusiform, length antennal segments: I-.23, II-.11, III-.15, IV-.19, V-.40.

Holotype: ♀ FLORIDA: Everglades National Park, Flamingo Prairie, 10-VI-1969 (R. M. Baranowski). In United States National Museum, no. 70806.

The unique type was taken on damp mud in an area known as Flamingo Prairie at the southern tip of Everglades National Park. This area is immediately adjacent to the present camp site which is the original location of the old town of Flamingo. Dr. F. Craighead (*in litt.*) informs us that in a number of coastal embankments a prairielike vegetation of grasses and shrubs will be found. This association is on well drained deep marl soil built up 1.5 to 2.0 feet above mean sea level. There is evidence to indicate that these prairies were formerly covered with hammock growth and that the present vegetation is the result of clearing and fire. Near Flamingo the clearing was for charcoal and for some farming. The present vegetation of these prairie areas is dominated by cordgrass (*Spartina spartinae* (Trin.) Merr. ex Hitchc.) and seaside daisy (*Borrichia fruitescens* (L.) D. C.).

Several subsequent trips to the locality, as well as the establishment of a blacklight trap, in an attempt to obtain additional specimens were unsuccessful.

It is unfortunate to be obliged to describe a new genus and species on a single female specimen. However, the cryptic habits of the podopines often necessitate such a procedure. Indeed the last two genera of podopines to be described, *Allopodops* and *Notopodops* Barber and Sailer were described from 1 female and two females respectively.

The difficulty of collecting these insects in their native habitats is evidenced in the case of *Amaurochrous ovalis* Barber and Sailer which was described from a male and 2 females from North and South Carolina. The senior author obtained a series of 76 specimens coming to lights at a gasoline station on the New Jersey turnpike 30 August 1957, at Elizabeth, New Jersey, the home town of H. G. Barber and where he had collected Hemiptera for many years without taking a single specimen.

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