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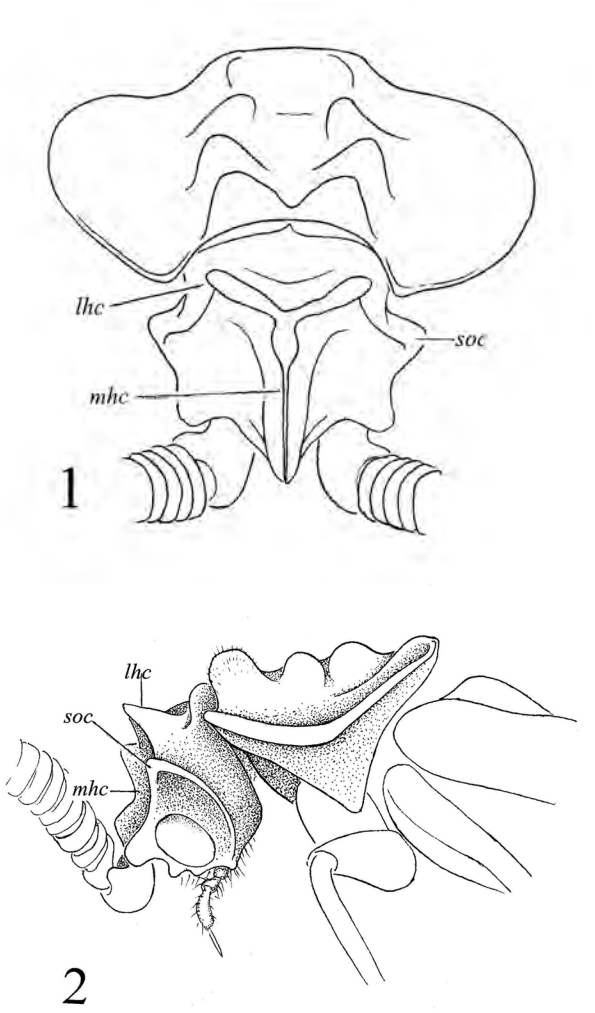
ECITOXENIDIA BREVICORNIS SEEVERS, A RARE MYRMECOPHILOUS BEETLE, OCCURS IN VIRGINIA (COLEOPTERA: STAPHYLINIDAE: ALEOCHARINAE: LOMECHUSINI). — Staphylinid beetles are prominent among the various arthropods that have adapted to an often precarious life as commensals in ant colonies. Although this relationship seems to be more frequent in the tropics, several species of host ants do occur as far north and east in the United States so as to be represented in Virginia; army ants (Formicidae: Ecitoninae) such as *Neivamyrmex* in particular are frequently involved in this kind of myrmecophily. A summary of North American staphylinids known at that time to occur with *Neivamyrmex* was published some decades ago by C. H. Seevers (1959), in which the genera *Microdontia* (4 species), *Ecitopora* (1), *Dinocoryna* (5), *Ecitonidia* (1), and *Ecitoxenidia* (3) are accounted, most of the 14 species being recorded from North Carolina, Alabama, Kansas, and Arizona. A later review of the Aleocharinae (Seevers, 1978) dropped *Ecitopora* (as of dubious status) but did not otherwise alter the 1959 roster. A subsequent paper by Frank & Thomas (1981) provided a Florida locality for *E. alabamae* and a detailed habitus illustration of the species that shows its essential identity with *E. brevicornis.*

In the local context, North Carolina was credited by Seevers (1959) to have the species *Dinocoryna bisinuata* (Casey), *D. schmitti* (Wasmann), *D. carolinensis* Seevers, and *Ecitoxenidia brevicornis* Seevers. The last two species were based on specimens found in colonies of *Neivamyrmex nigrescens* (Cresson) at Southern Pines; apparently neither has been collected subsequently. Since this ant conducts virtually all of its activities underground, it is not often collected and its biology is poorly known.

On 2 August 2008, a blacklight operated at a small stream in Patrick County, Virginia, captured a single specimen of a small beetle of such curious form that identification even to family was initially retarded. On seeing this specimen at a later date, Dr. Arthur V. Evans recalled a similar image figured in the chapter on Staphylinidae in “American Beetles” (Newton et al., 2001: 318, fig. 278.22). By direct comparison of this beetle with the holotype of *Ecitoxenidia brevicornis* in the Field Museum of Natural History, Dr. A. F. Newton was able to establish conspecificity of the two individuals. This fortuitous collection is apparently only the second time that this species has been found (A. F. Newton, pers. comm.); its range is thus extended some



Figs. 1-2. *Ecitoxenidia brevicornis* Seevers. Fig. 1. Head and pronotum, oblique anterodorsal aspect to show ornamentation of head. Fig. 2. Same specimen, lateral aspect of head and thorax. Abbreviations: *lhc*, lateral hyoid crest; *mhc*, median hyoid crest; *soc*, supraocular crest.

240 km northwest from Southern Pines, increasing the known beetle fauna of Virginia by another species.

Collection data are as follows: VIRGINIA: *Patrick Co.*: Mill Creek at Va. Rt. 628 bridge, ca. 1 mile west of Stella, 2 August 2008, R. L. Hoffman legit (VMNH 1). Two subsequent operations of a blacklight trap at this site, and two Berlese extractions of nearby soil and litter, failed to produce additional specimens of either the beetle or *Neivamyrmex* ants. However, since *N. texanus* is known from Virginia, and both *N. nigrescens* and *N. opacithorax* surely occur here (Snelling & Snelling, 2005; D. A. Waller pers. comm.), it seems likely that our knowledge of the instate distribution of both insects will eventually be improved.

The several illustrations of this species in Seever's (1959) description show the general appearance of the animal adequately, but, because they were made in a dorsal aspect, fail to represent the actual complexity of the forebody ornamentation. To aid in recognition of any future captures, I provide here some drawings made from oblique and lateral aspects (Figs. 1-2). Seevers correctly noted the presence of a median hyoid ("Y-shaped") carina on the head and of two paramedian ridges on the pronotum, but these are more prominent than the dorsal view would suggest, and the supraocular carinae have not been previously mentioned.

In contrast, except for the greatly enlarged antennae with short, broad, discoid articles, the head and pronotum are essentially unmodified in the two species of *Dinocoryna* known from North Carolina. It is interesting to speculate on what selective factors – certainly including the host ants – have resulted in the structural innovations of *E. brevicornis.*

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