NEW HISPANIOLA LOCALITY RECORD FOR THE ENDEMIC
BEETLE NICTROPHORUS HISPANIOLA SIKES & PECK, 2000
(COLEOPTERA: SILPHIDAE: NICTROPHORINAE)

Daniel E. Perez-Gelabert
Integrated Taxonomic Information System (ITIS).
Department of Entomology, National Museum of Natural History, Smithsonian Institution, P.O. Box
37012, Washington, DC 20013-7012, USA (e-mail: perezd@si.edu)

ABSTRACT

The endemic Hispaniolan beetle Nicrophorus hispaniola Sikes & Peck, 2000, is reported
from the locality of Zapotén, Sierra de Bahoruco, Dominican Republic, a national park outpost
near the border with Haiti. This species appears restricted to Sierra de Bahoruco and Sierra de
Neiba in the southwestern corner of the Dominican Republic.

Keywords: Nicrophorus hispaniola, Silphidae, Sierra de Bahoruco, conservation.
**General recognition** (Figs. 1A-C). Nicrophorine silphids are dorso-ventrally flattened beetles, antennae characteristically with a pubescent 3-segmented club, antennal insertions on dorsal face of head, a large clypeus, a large scutellum, and a subapical bulge on each elytron. *Nicrophorus hispaniola* can be recognized by having antennae clubbed with apical three antennomeres yellowish-orange, pronotum orbicular in outline with greatest width across midline, elytron with a red anterior squared fascia and one posterior squared macula. Elytra covering only 2/3 of abdomen, their posterior margin straight. In the key to New World *Nicrophorus* of Sikes & Peck (2000) *N. hispaniola* is distinguished from its closest congeners by the colored anterior red elytral fascia that stretches laterally and the posterior elytral macula being large but not touching the elytral margin.

**New record.** One male, DOMINICAN REPUBLIC, Zapotén, Prov. Independencia, Sierra de Bahoruco, 18°18.707’N 71°42.467’W, 1540 m, 13-14/ix/2014, uv light & night collecting, D. Perez. Deposited in the entomological collection of the National Museum of Natural History, Smithsonian Institution, Washington, DC (USNM) where this species was not previously represented. This specimen was collected at a UV lighted sheet during crepuscular to early night hours.

Figures 1A-C. Habitus pictures of male specimen of *Nicrophorus hispaniola* from Zapotén, Sierra de Bahoruco. A, dorsal, B, ventral, C, lateral).
Measurements. Body length: 21.0 mm, maximum body width: 7.5 mm, pronotum width: 6.0 mm.

Comments. Previous collections of *N. hispaniola* were made between late June and early December. The new specimen was collected in September, so it falls near the middle of these dates. This species has been taken both from carrion traps and at black lights between 730-1930 m above sea level. The present specimen collection at 1540 m falls near the midpoint of these elevations. The forest at Zapotén is dominated by mountain pine (*Pinus occidentalis*) mixed with a variety of broadleaf vegetation. In contrast with the continental species of the genus which have large distributions, *N. hispaniola* appears to have the smallest distribution range of any New World species (Fig. 2), being restricted to the southwestern corner of the Dominican Republic, a region less than 100 km² (Sikes & Peck, 2000). This border region of Haiti and the Dominican Republic is a troubled habitat insufficiently protected even if located in a remote montane area and within a national park. This area of unique biodiversity must be saved from the ravages of poverty and indiscriminate exploitation by the producers of charcoal and squatting peasants that damage these forests. The Enriquillo-Bahoruco-Jaragua biosphere reserve, which includes this national park and two other adjacent parks, has been recognized as a region containing a very important representation of the biodiversity in the Dominican Republic, including a large number of threatened endemic species (León *et al.*, 2011). This unique beetle is a rare species potentially threatened with extinction. As commented by its describers, such species possessing unique morphological characteristics are very important for phylogenetic studies (e.g., Sikes & Venables, 2013) to better understand the evolution of the whole group. The divergence data analysis of Sikes & Venables (2013) estimated that the speciation event that resulted in *N. hispaniola* splitting from its sister species *N. pustulatus* occurred between 35-15 million years ago. It would be interesting to investigate whether *N. hispaniola* is also a parasitoid of snake eggs as it has been documented for *N. pustulatus* (Smith *et al.*, 2007). The conservation status of *N. hispaniola* should be further investigated and its conservation should become a priority in the park management plans.

Figure 2. Map of Hispaniola showing the approximate distribution of localities at which *Nicrophorus hispaniola* has been collected.
ACKNOWLEDGMENTS

Michael A. Ivie (Montana State University, Bozeman) called my attention to this unique beetle. Stewart B. Peck (Carleton University, Ontario, Canada) and Derek S. Sikes (University of Alaska) provided useful suggestions and input on the manuscript. Karie Darrow (Department of Entomology, USNM) produced the habitus pictures.

LITERATURE CITED


[Recibido: 05 de agosto, 2016. Aceptado para publicación: 01 de septiembre, 2016]